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RELATIONSHIPS BETWEEN ACHIEVEMENT IN HIGH SCHOOL, COLLEGE, AND OCCUPATION--A FOLLOWUP STUDY.

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THE ACADEMIC, OCCUPATIONAL, AND SOCIAL ACHIEVEMENTS OF A SAMPLE OF HIGH SCHOOL GRADUATES (STUDIED PREVIOUSLY WHILE IN SCHOOL) WERE EXAMINED TO ISOLATE THE FACTORS OF ADOLESCENCE WHICH ARE RELATED TO LATER ACHIEVEMENT OR FAILURE IN COLLEGE OR AN OCCUPATION. THE PROJECT WAS A FOLLOWUP STUDY AND WAS CONCERNED WITH AN ANALYSIS OF DATA GATHERED AT TWO POINTS IN TIME, RATHER THAN A SEQUENCE OF LONGITUDINAL DATA. OVER 350 MEMBERS OF A METROPOLITAN HIGH SCHOOL SENIOR CLASS COMPRISED THE SAMPLE FOR THE ORIGINAL PROGRAM. THE FOLLOWUP STUDY CONSISTED OF CONTACTING AS MANY OF THIS GROUP AS POSSIBLE, CONCENTRATING ON A SMALL PERCENTAGE FOR THE MAJORITY OF THE DATA. IN THE INITIAL STUDY DATA WERE GATHERED ON INTELLIGENCE, PERSONALITY, SOCIAL PARTICIPATION, SCHOOL RECORDS, AND TEACHER RATINGS. THE FOLLOWUP PROJECT ADDED INFORMATION ON COLLEGE GRADES, JOBS HELD, PERSONALITY STRUCTURE, SOCIAL STATUS, AND PROBLEMS IN COLLEGE OR JOB EXPERIENCE SINCE LEAVING HIGH SCHOOL. ECONOMIC POSITIONS AND BEHAVIORAL CATEGORIES WERE ALSO RATED. THE TWO INVESTIGATIONS WERE CONDUCTED 6 YEARS APART. PROJECT RESULTS SHOWED THAT ADULT PERFORMANCE WAS POSSIBLY MORE CLOSELY RELATED TO EVENTS AND EXPERIENCES THAT OCCUR AFTER HIGH SCHOOL THAN TO HIGH SCHOOL BEHAVIOR OR ACHIEVEMENT. THESE POST-HIGH SCHOOL FACTORS APPEARED TO BE INHERENTLY RELATED TO ADULT PERFORMANCE--(1) FAMILY EXPERIENCES, (2) SOCIAL CLASS CONTEXT, AND (3) LATER OCCUPATIONAL SITUATIONS. (JH)

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Relationships Between Achievement in High School, College and Occupation: A Follow-Up Study

Cooperative Research Project No. 542

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FOREWORD

We began this project with the belief that late adolescence and early adulthood spanned an important phase of development--perhaps as significant and decisive as adolescence itself. We have concluded this report with the conviction that this phase is even more critical than the high school years and that the role of events during the transition period in establishing patterns of adult behavior has been profoundly underestimated. This project is an initial step toward understanding more completely the nature and effects of the transition process.

We are grateful for the support of Dr. Francis Chase, Dean of the School of Education and Chairman of the Department of Education, who promoted our efforts with his leadership and personal encouragement. We also acknowledge, with thanks, the assistance we received at various stages in the overall project by small grants from the Ford Foundation Fund for the Advancement of Learning and the Social Science Committee of the Division of the Social Sciences of the University of Chicago.

This report represents a combined effort in which members of the research staff took much responsibility. We acknowledge the contribution of these colleagues: Jack Forman, who helped prepare Chapter III on the impact of academic achievement and coordinated several other sections of the report; Gerry Gerasimo, who supervised the field work and prepared the material and draft for Chapter V on social data; Betty Jane Hale, who analyzed data on the single and married males and prepared material on occupational aspects of the research; Betty Katzin, who worked with unselfish zeal on many aspects of data analysis and write-up, particularly the material dealing with the role of married women; Ruth Lyell, who helped with interviewing and with analysis of the semantic differential data in Chapter VI and elsewhere; Mike Nawas, whose voluntary work on ego functioning measures of the TAT added valuable evidence and material to the report at several points; and Judith Schaefer, who was a member of the research team in 1952 and who has contributed in many ways to the project, particularly in preparing drafts for parts of Chapters IV and VI.

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Other members of the project who helped with data analysis at various points were Mrs. Nancy Gordon Dowty, Lucille Viator, Mrs. Helen J. McMahan, Mrs. Harriet Meadors, Mrs. Joyce Solomon, Helen Bayley, and our coordinating secretary, Hilly Sletteland.

In the difficult but critical task of editing and preparing the final draft of the manuscript we had the tireless, efficient assistance of Mr. Hess's secretary, Mrs. Ruth Vogeler and her daughter Nancy, both of whose generous good spirit and energy helped us meet an otherwise impossible deadline.

A. D.

R. D. H.

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CHAPTER I

ACHIEVEMENT DURING ADOLESCENCE AND ADULTHOOD

Relationships Between Behavior of the Same Individuals During Adolescence and Young Adulthood

In all human societies, becoming an adult is the crowning stage of human development. Childhood has its developmental tests and victories, adolescence its tremendous burst of new psychic energies and desires. But becoming a full man or woman in social, occupational and sexual roles is the most complex and dramatic development in the human life-cycle.

Yet, in our society, and in the sciences of human development, this stage is the least understood. Childhood has been the most intensively studied phase of human development, and young adulthood the least examined.

This research has been an effort to understand the processes through which the individual in American society resolves the social and psychological conflicts of late adolescence and assumes the social position and responsibilities of an adult. The young adults in this study were white men and women, chiefly of North European ancestry. They were either 25 or 26 years old at the time they were interviewed as young adults. The entire sample fell within the central part of the social-class range in a metropolis. We had studied the same individuals eight years earlier, when they had been seniors in a public, metropolitan high school. In such high schools in Mid-Western cities, approximately 70 percent of all white students come from that part of the social-class range in which our sample falls, namely middle-middle class, lower-middle class, and upper-working class.

The purpose of the follow-up study was to discover the relationships between their behavior during the last stage of adolescence and their behavior as young adults eight years later. Our plan was to test hypotheses concerning these relationships and to draw inferences concerning the transition between adolescence and adulthood.

The term, "transition to adulthood," understates the stress of the actual process. Actually this stage of human development involves a repeated struggle to break the adolescent emotional and social dependence upon parents and other adults--a dependence which is combined with hostility toward these same representatives of authority. The transition is really a series of battles against these inner and outer forces, with periodic gains, often followed by retreats to an adolescent pattern.

No society by an "initiation ritual" can transform the adolescent group at a single magic stroke into an adult group. Social anthropologists who have studied intensively the processes of socialization in pre-literate societies have documented the gradual induction of adolescents into adult roles through specific training by parents and other kin, and in some cases, by secret male or female organizations. In those cases, such as Meyer Fortes' study of the Tallensi (49) and John Whiting's study of the Kwoma (158), where the actual learning of adult roles has been carefully traced, the transition to adult roles has been gradual. The maturation of adolescents can in no societies be accomplished by a "total-societal" plan. Socialization at any age is a slow process of learning, because the change in previous habits and self-concepts involves complex reorganization of behavior.

Societies differ, however, with respect to the degree of planning for the induction of adolescents into adult roles. American society, represented by educators, legislators, and business men, moreover, clearly feels the need for a more systematic, socially directive plan for the induction of adolescents into adult economic, familial and organizational roles.

The questions we have posed are basic for high schools, colleges, business firms and all other types of American institutions confronted by the complex problem of training youth for adult roles. The major unsolved questions about the transition from late adolescence to adulthood in our society are the following: What are the training and socializing processes in this society for preparing youth to learn adult economic, familial and community roles? What are the patterns that characterize induction into adult roles and status? What are the relationships between achievement in adolescence and achievement in adulthood? What are the significant relationships between the academic, social and personality variables within adolescence? Within adulthood? How is behavior during adolescence related to that of the same individuals during adulthood?

A. How Effective Is the High School In Training For Adult Roles?

The historical view of the basic socializing functions of the high school and college in America is that they are to help prepare the physically mature, but still dependent and lingering adolescent, for the adult behavior of self-support and self-direction. Their functions also include training of the individual to assume the ultimate responsibility of adulthood, namely to marry, to live with one's spouse, to procreate and to help rear children of one's own.

Thus, the high school and college should function to prepare adolescents specifically for the major types of adult responsibility. Instead, the high school, and to a large extent, the liberal arts college appear to function chiefly as custodial institutions to provide adolescents with academic and to a limited extent, vocational instruction and external control during what is regarded as an indefinite moratorium before adulthood.

The results of the present study indicate that for most students the high school has relatively little effect upon either the induction into adult roles, or upon the level of adult achievement. Even the relationship of academic achievement in basic academic subjects to adult occupational level at age 26 is not significant, except for those males who attended college.

For those who do not attend college, therefore, the occupational system becomes the chief socializing and training agency in which the older adolescent and young adult learn the habits of self-direction, acceptance of responsibility, and, above all, the concept of oneself as an adult which the skilled and white-collar positions demand. This finding may come as something of a surprise to those accustomed to thinking of our educational institutions as the fundamental agencies in the preparation of youth for adult behavior. For males, it seems clear, the occupational system is more important in the transition to adulthood. Furthermore, we have found that in most other areas of behavior, there is little relationship between high-school variables and those in young-adult behavior. For instance, there is very little relationship between amount of social participation (or social leadership) in high school and any area of behavior in young adulthood. Furthermore, there is no relationship between grades in high school and salary-level in young adulthood.

Perhaps our most general inference, after examining several thousand correlations and testing many specific hypotheses concerning variables in behavior during high school and variables during adult life, may be stated as follows: The family, the social class and the economic system appear to be more influential in the socialization of the young than does the school. The effect of the educational system upon the socialization of the adolescent and young adult seems to have been overestimated in educational theory.

This conception of the high school as a socializing agent may have been based upon an assumed parallel between the operating functions of the elementary school and the secondary school. For there can be little doubt that the primary and elementary schools do constitute basic agencies in the socialization of the child, having an effect subordinate only to that of the family and social class. In primary and elementary school, the child first learns to participate in a society consisting of non-kin, which is more complex than his family. The school also trains the child in certain basic aspects of thinking, feeling and acting and helps him extend those basic identifications formed in the family to the larger societal group of teachers and other parent-surrogates.

In contrast, the junior high-school and high school, so far as we have been able to discover, do not constitute primary agencies in the socialization process, either in respect to training the adolescent in adult social values, roles and skills, or in nurturing his psychological capacity for decision-making, self-direction and acceptance of adult responsibilities.

Our conviction resulting from the analysis of these data is that other systems of behavior and other socializing agencies must be carrying on most of the actual preparation of adolescents for adult roles and responsibilities. Possibly more important mediators of the transition to adulthood are both the adolescent peer-group and the parental family. The most important is the economic system, more specifically occupational relationships and training within the economic system.

In the last analysis, the relative ineffectiveness of the high school in training the adolescent for adult roles and achievement cannot be attributed chiefly to unrealistic planning and teaching by secondary administrators and teachers. American society, itself, does not regard adolescence as a stage of active social and economic preparation for adulthood. In order to insure its own goals, our society withholds from the adolescent the full rights of adulthood. Upper-middle-class society, especially, postpones the attainment by the individual of adult social, economic and sexual status, and therefore of psychological maturity. From the point of view of the professional classes, it seems necessary to surround the adolescent male and female with these "safeguards," so that the male may complete the extended education necessary to attain a career at this level, and the female may learn the cultural behavior necessary to attract a middle-class husband. The clearest illustrations of our society's postponement of the development of a fully autonomous individual are the laws in many states prohibiting marriage before 18, and full-time employment before 16 or 18. These laws are based upon the concepts of middle-class legislators, social workers and judges, who believe that individuals under 18 are not "prepared" to assume the duties of self-support and marriage.

An individual never becomes independent, however, until he has the social right, and makes the effort. He is never "prepared" for adulthood until he tries to become autonomous, self-supporting and marries. In our society, this transition is necessarily gradual, and in addition is postponed socially, and subjected to emotional conflict as a result of the pressures from parents and school to keep adolescents dependent.

B. Induction In American Society--A Gradual Process.

The transition to adulthood in the United States, therefore, is a long and uneven process. Adult roles in a modern industrial nation are extremely complex and numerous. Entrance into the middle-class adult economic and social worlds requires a long probationary period, devoted chiefly to education, and lasting from 16 to 25 years. Our industrial urban society is so complex that those responsible for the socialization of the adolescent cannot identify the hundreds of social and economic roles in the adult world, nor communicate to their offspring or students any specific functional knowledge which may guide their entrance into the apparent labyrinth of adult society. The most the present high school system can do is to attempt a limited amount of counselling with regard to occupations and colleges. High school programs vary widely with respect to concepts of effective training for adulthood. This variation is related to the socio-economic and urban-rural nature of the school's population. Some high schools teach and discipline adolescents as if they still were children, while at the other extreme, some teach occupational skills and give careful training for marriage and infant-care. On the average, however, the high school is not conceived, planned, nor staffed to chart the routes by which the adolescent may learn to solve the occupational and social maze of adult society, nor to facilitate greatly the process of induction.

In modern America, the induction of youth into adult roles seldom has been studied. One of the first such researches was carried out by a group of psychiatrists, sociologists, and psychologists, under the leadership of Professor John H. Rohrer (40). This research-team studied the same individuals during 1953-1956 who previously had been the subjects of research by Davis and Dollard in 1938-1940 (33). By the time of Rohrer's follow-up study, the former adolescents of 12 to 17 years of age who had been interviewed intensively several times each week over a period of a year for the Children of Bondage research, had grown into men and women, 27 to 35 years old. These individuals were American Negroes. In the absence of any scientific evidence to the contrary, it is assumed by social scientists that both the social learning processes and the ego-developmental dynamics of this group are basically similar to those of white groups of parallel social classes.

Rohrer's research on this sample of young adults emphasized the importance of the primary role identification in determining both the degree of success in learning adult social roles and also the quality of integration in the individual's psychic functioning. Such primary identifications were not idiosyncratic, but typical of groups. For instance, for one group of young adults, the primary role identification was with the middle class. With another, including both males and females, the primary role identification was with the maternal role in a mother-controlled family. In a third group, it was with the gang, and in a fourth, with the family "not only as a focus but almost the total sphere of social life."[1]

Rohrer found that his data confirmed the great importance of significant adults to the shaping of the individual's adult social behavior and personality structure. Such figures are "intimately linked to the individual's development of ego ideals."[2] The clarity of ego ideals, in turn, proved to be one important determinant of the individual's establishment of a primary role identification in adulthood.

The most influential determinant of the patterns of role identification, Rohrer's group agreed, was the family. Most patterns of identification centered on parental life in the parental family of the individual. Both the middle-class identification and the gang identification were primarily reactions to parental family structure and dynamics. The next most powerful factor in affording an arena in which initiative, self-esteem and other ego forces may develop, and second only to the parental family in socialization of the adolescent and the young adult, was the peer group, both the social cliques of middle-class youth, and the gangs of working-class youth. The gang, itself, supplies "positive role models and values of its own."[3]

Adult role models, Rohrer concludes, are based upon the primary social institutions. In his emphasis upon the basic order in American socialization, he agrees with Davis, but his findings differ basically from those of Symonds and Jensen (81). They also are at variance with the assumptions of Ruth Benedict (9) in her much quoted article on cultural continuities and discontinuities. For Rohrer, in his intensive analysis of the social and emotional development of these young adults, is forced to the conclusion that adult role identifications are "patterned in institutions: the family, the school, the gang. Such institutions tend toward order, and they provide a context of learning in which individuals may come to shape their social relationships and psychic identity in similar ways.

The idea that there is a basic continuity underlying the uneven development of the child, adolescent and young adult in

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[1] Edmonson, M.S., and Rohrer, J. H. (eds). Eighth Generation (New York: Harper, 1960), p. 299.

[2] Ibid., pp. 299-300.

[3] Ibid., p. 300.

American society, and that both identity and the deeper aspects of identification are anchored in the social structure of the family, age-group, and sex-group had been emphasized previously by Davis. "When one considers that socialization in the United States consists of learning the culture and sanctions of a succession of--statuses--in childhood, in the school, in the armed services, in industry, in parenthood, in old age--our society and its culture do not appear nearly so 'discontinuous' as Benedict and others have thought it to be. Through each of these status-relationships, whether of father to son, mother to daughter, older brother to younger brother, teacher to student, peer-group leader to member, officer to enlisted man, or employer to employee, there runs a cultural and psychological continuity. - - - This continuity is the basically similar sociopsychological processes involved in the various types of status relationships."[1]

Different conclusions were reached by Professor Percival Symonds in his From Adolescent to Adult, a follow-up study of 28 individuals, studied first in 1940 when they were between the ages of 12 and 18, inclusive. In 1953, when they were restudied, eight of these 28 had graduated from college, and two others had had some college. Of the 28, 21 had married.

Professor Symonds, whose data were derived from one long guided interview and one projective instrument given to each individual, found that personality trends were remarkably persistent over the thirteen-year period. The parental family proved to be the most powerful influence upon the degree of success in adult development. A girl's difficulties with her mother during adolescence seemed to persist into adulthood.

No planning either for education or occupation was found in the case of the great majority of these adolescents and young adults. Both their jobs and their marriages seemed to have been largely the result of chance. Professor Symond's conclusions seem to echo the prevalent feeling in America that there is little or no method in American society for the induction of adolescents into adulthood. "The general impression gained from reviewing the experiences of these twenty-eight individuals as they progressed from adolescence to young adulthood is that their maturing was on the whole a blind, trial-and-error process. Little or nothing has been done to help them to anticipate and plan the next steps. Every problem had to be met and dealt with whatever resources the individual had available when he came face-to-face with it. Formal education gave almost no help in preparing a person to meet the problems of education, vocation, and marriage that he must inevitably face. A century ago, when a trade was learned through apprenticeship and when the arts and skills homemaking were learned in the parental home, such skills were passed along from one generation to another without difficulty. Now, with the complexity of modern living and the lessening cohesion of family life, these older institutions can no longer be depended upon to provide necessary instruction. There is need today to plan for the induction of adolescents into the skills of adult living through formal education."[1]

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[1] Davis, A. Psychology of a Child in the Middle Class (Pittsburgh: University of Pittsburgh Press, 1960), pp. 167-68.

In contemporary America, research into the occupational socialization of the young adult has been rare. Most of it is quite recent, and has been the work chiefly of Professor Everett Hughes, Professor Howard S. Becker, and their colleagues (79, 7). After many years of research upon the social structure, cultural roles and sanctions of occupational groups in this and other countries, Professor Hughes initiated studies, in collaboration with Professor Becker and others, dealing with the social processes by which the teacher or physician learns the code, the systems of defense and initiative, and the other social skills necessary for survival and advancement in their professional groups.

In the medical school these processes include the student's learning of the standards and effective methods of preparation, regarded as effective by the peer-group and by the faculty. This skill involves learning to use the "grapevine" sources of information concerning the relative importance of various materials in each course, and the particular interests and emphasis of individual professors. The great majority of medical students learn to regard this group-system of communication as essential for success in scaling the otherwise insuperable mountains of course assignments. Once the physician has completed his internship and residency, he discovers an even more elaborate system of social interaction and cultural sanctions, the learning of which constitutes his effective induction into the practice of medicine. The learning of the "ropes" within his branch of the hierarchy of physicians, and his skill in adjusting to the social and cultural patterns of expected behavior within hospitals and private practice often prove more important factors in success or failure than his achievement in medical school, or his clinical skill.

The pivotal effect of college education upon successful induction into the executive world of industry and big business was pointed out by Professor Lloyd Warner during his research on Yankee City as far back as 1935 (153). In 1947, he reported that movement upward into the executive positions in the factories of Yankee City had become a function chiefly of college education. In 1955, as a result of a national study of 8,562 top executives of large businesses in the United States, Professor Warner and Professor James C. Abegglen, reported that 57 percent of these executives were college graduates and that another 20 percent had attended college, so that four of every five had been to college (1). The proportion of college graduates among executives was almost twice as high as that found by Taussig and Joslyn in 1928. In a recent paper, Howard S. Becker has pointed out that big business now values college education highly in selecting its junior executives, not so much for the academic content of that training, as for the training in organizational skills, and middle-class manners which college extra-curricular activities provide. Thus, the college has become, especially for those students from lower-middle class and upper-working class, a major socializing agency, preparing both the older adolescent and the young adult for induction into the social and cultural behavior-patterns of the executive and professional positions.

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[1] Jensen, A. R., and Symonds, P. From Adolescent to Adult (New York: Columbia University Press, 1961), pp. 206-7.

C. Changes During Eight Years Following High School.

Even though transition from adolescence to adulthood is a gradual learning process, eight years are sufficient time for marked changes to occur in both social and emotional learning. From the time we first studied our sample during their senior year in high school to the time of our follow-up study eight years later, most of these individuals had made the basic decisions concerning occupation, marriage and the care and support of their own families. We seem confronted by a paradox. If their high-school academic and social achievement does not relate to their adult occupational and social status, except for those who attended college, what training *did* prepare them for the relatively successful transition to adult roles?

To gain light upon this complex and difficult problem, one must examine more carefully our particular class and ethnic sample in the perspective afforded by available sociological knowledge of other cultures and status-levels in which American adolescents grow up. It will then become clear, we feel, that the conditions for the attainment of the social roles and functions of adulthood are particularly favorable in the segment of American society represented by our sample. First, we shall cite a few of the most general findings concerning changes during the transition.

The contrast between the behavior of this group during its senior year in high school and eight years later was extreme. As seniors in high school, the overwhelming majority of these individuals had no plans to enter college, no choice of any occupation, and no intention to move out of the parental home, nor to marry. As adolescents, they were confused about their status in society, estranged from teachers and parents, and unable to commit themselves to a career-choice. Eight years later, 84.1 percent of the females were married, and 69.6 percent of the males. Of the married males, 77 percent had one or more children; of the married females, 80 percent. Among the men, 44 percent already had attained an occupational level equal to that of their fathers, and an additional 37 percent had reached a higher occupational level.

For the males, the median monthly salary was almost $500. Among the males, 75 percent had entered college, and 33 percent had graduated. As to residence, 68 percent of the males, and 91 percent of the females had moved from the parental home, and 45 percent of the sample were buying their own homes.

Judged by the basic societal criteria of adulthood, this group consisting almost entirely of upper-working class and lower-middle class youth had, on the average, completed the transition to adulthood very successfully. Using their behavior in their senior year in high school as a basis for prediction, we should not have expected that so large a proportion of them would have established themselves as adults, with spouses, children, careers, and homes of their own, just eight years later.

In seeking factors in their adolescence which might account for their remarkable success in achieving the social and economic behavior of adult status, we examined first their academic and social achievement in high school, using data collected when they had been seniors. They had not been an elite group either in I.Q., or in academic achievement. They had attended an average American high school. Their high school had not been a strong, college-preparatory school, characterized by high academic demands and pressure for college entrance and Merit Scholarships. Its academic standards were definitely below those of the four or five high schools in this metropolis whose best students won the city and state prizes in mathematics and languages, and entered the colleges with the highest requirements for admission. The major emphasis in the high school attended by our sample was upon athletics, especially upon football and basketball in which they frequently won the public-school city championships, and upon membership in jacket-clubs, a kind of high-school fraternity or sorority.

The senior class studied by us reported that they were most interested in athletics and social activities in high school. Only a third of them mentioned their studies as one of the three most important aspects of their high school life. And, to sharpen the point, 31 percent of them added that there was no teacher in high school who had particularly influenced them.

Yet, this group has become a remarkably successful adult group, as judged by the social and economic criteria of adulthood, established by our society. If neither their high-school academic achievement, nor high-school social achievement accounts for their high rate of successful transition to adult behavior, what factors do account for this success?

After having tested hundreds of hypotheses concerning the relationships of high-school academic, social, and personality variables with adult behavioral variables, we are forced to conclude that, for the most part, the markedly successful transition to adulthood by this group is chiefly to be related to the cohesion, occupational security, and basic value-system of the families in which they were socialized.

For the top part of the working class, and for the middle class, American society is increasingly effective. The most substantial increases in the standard of living (income, occupational security, college education) since the great depression of the 1930's have taken place in this part of American society. While all ethnic groups at these class levels have participated in this gain, it is precisely the groups in which most of our high school sample fall, that of North European background, which has the most stable and secure economic and social life. Therefore, this segment of American society, more than any other except the upper-middle and the upper classes, provides its youth with the firmest launching base and surest routes for the transition to adulthood.

The relative ease, speed, and certainty of the transition from adolescence to adulthood vary with the particular segment of the society in which adolescents are born and reared. These social factors in the transition do not vary concomitantly, however. In the slum group, the break with the parental family occurs earliest, but leaves many individuals still in a socially disorganized, and emotionally immature state. In upper-middle class, on the contrary, the transition from adolescence to adulthood occurs latest and requires the longest social and economic moratorium, but leads to a higher level of economic security and social complexity.

Our sample comes from the socio-economic levels between these two extremes. It is not an upper-middle class sample; only two of our students were born to parents of professional status or of executive position in large firms. Nor is it a lower-working class sample. Only 3.6 percent of the fathers of our males, and 6.8 percent of the fathers of our females were unskilled or semi-skilled workers. Our students originated, therefore, in lower-middle class families and in skilled working class families.

Sociological and social anthropological research on American cities has emphasized certain fundamental differences between the cultures and the social organization of upper-middle class as contrasted to lower-middle class. Whereas the basic moral system with respect to sex, aggression, money and property are quite similar, there are marked differences between upper-middle class and lower-middle class with respect to occupational level, income, type of house lived in, source of income, college attendance, and child-rearing. These differences are highly significant statistically, and the characteristic patterns of cultural behavior within the family, including the training of children and adolescents also differ.

Upper-middle-class culture is much more complex than lower-middle-class culture. Therefore its goals with respect to the education and rearing of offspring require a longer probationary period of the adolescent, and a much longer moratorium of economic and emotional independence. Upper-middle-class culture, in respect to child-rearing and the induction of the adolescent into adulthood, also is changing more rapidly than lower-middle-class culture. The changes in child-rearing practices have been chiefly the result of the influence of psychoanalytic concepts, (and of misunderstandings of such concepts) of personality development and child-rearing. Cultural attitudes toward child-training change in cycles of severity and leniency. For instance, concepts of the optimal time and method for nursing, weaning, and toilet-training children have tended to swing back and forth every fifty years. The changes in child-rearing practices originate in the upper and upper-middle class, not in the lower-middle and working classes. They then work their way downward in the socio-economic hierarchy, much as furniture styles originate in the higher classes, later are taken over by the lower-middle class, until finally the very furniture once used in the house of the aristocracy, but discarded to servants or the needy, ends up in slum homes, whence it is rescued by dealers and sharp-eyed collectors, and resold to the upper classes as "antiques."

During the last generation, the upper-middle class, the best informed concerning progressive education and liberal pediatric concepts, has been developing a cultural pattern of child-rearing nearly the opposite of that prevalent in the upper-middle-class European families of Freud's day. Major historical factors, World War II and the subsequent universal draft in peace-time owing to the rise of two armed camps in the world, have led to the gradual evolution within upper-middle class of a new cultural plan for late adolescence and early adulthood. Increasingly these youngsters marry during college or during their professional training. The married couple are supported chiefly by gifts from the two sets of parents. While the male still is in professional school, the young couple have children. Both generations of offspring then are supported chiefly by the parents of the two spouses. These youth therefore live in a culture which enables them to begin the transition to adult status in the areas of marriage, parenthood, and the rearing of their children, while they, themselves, are still dependent economically upon their own parents. Upper-middle class culture is thus developing a type of transition to adulthood which is new to middle class, though found in upper class, and in many preliterate societies. Such a transition provides some degree of adult functioning in respect to marriage, procreation and rearing of children, but extends the period of dependence, within the economic and occupational-identity fields.

In most such cases, it seems likely that the emotional dependence of the individual upon his parents will be prolonged. In our kind of society, a man cannot feel himself an adult until he has attained his occupation, supports his own family, and stands on his own feet. This additionally prolonged moratorium in upper-middle class probably only increases the resentment of the youth toward his parents. The only way to become independent is to support oneself, and take one's chances with life.

If one looks at the other extreme of social status, the Negro-American students in our sample, one sees at once the pivotal effect of the social and economic structure in facilitating or blocking the transition of young individuals to adulthood.

Whereas the white, North-European group of our students, coming from economically stable working-class and lower-middle-class families, have made the transition with a large degree of success, the Negro students in the same high school have had far greater difficulty. These students were socially excluded in this high school, with its 95 percent white population. The Negro community from which they come is severely damaged by job-restrictions, based upon color. This generations-old economic deprivation still is documented by the "White-only" advertisements for help in all the city's newspapers. Negroes are barred from the skilled-labor unions, and even from the city's public high-school programs for training apprentices. This crippling economic deprivation has subjected most Negro families to poverty and periodic unemployment, and to the attendant high rates of desertion by fathers, and illegitimate births by mothers.

Some Negro students did well in this high school, though none did nearly so well as the leading Negro students in the city's best high school, where three Negro males have won National Merit Scholarships during the last two years, and all have entered Harvard. Nevertheless, a surprisingly high proportion of our Negro students entered college. But after college, even these met the economic barriers, and many of the girls married men who could not obtain regular skilled or white collar work, or who followed the pattern of desertion learned in lower class.

In the ethnic ghettoes, Italian-American or Polish-American youth in this city face the same kind of uncertain and disorganized induction to adulthood. Owing to economic and residential subordination, practically none of our high-school's population was Italian-American or Polish-American.

Our sample, however, consists overwhelmingly of youth from one of the most stable, strongly organized segments of our society. They are chiefly of German, Irish, and Scandanavian background. Their parents are either skilled workers, with well-paid and secure positions, small white-collar people, small professional persons, or executives in small firms.

This North-European lower-middle and upper-working class society traditionally has placed its strongest emphasis upon gaining steady occupations, real property, savings, insurance and economic security. Only in the last generation has it approved of college education, and then only for its sons, as a means of gaining economic security. Before World War II, most parents in this community regarded a high-school education as entirely sufficient preparation for either the skilled jobs, or the small white-collar positions which their children would fill. Today, the parents feel that, "A boy needs a college education to get a good job. In my day you didn't, but today you need a college education if you are a boy."

But not if one is a girl. Only 9 percent of the girls in the senior class finished college. Girls are expected to work for a year or two after having finished high school, and then to marry. "A girl is going to marry soon, so why does she need to spend all that money and time on college?" is the cultural rationalization.

This part of our Mid-Western society teaches its children and adolescents, then, to seek occupational security first. Home-ownership is the second most strongly held value. Most of the parental families own brick bungalows of five to seven rooms, or two-flat buildings, with five or six rooms in each flat. The less substantial families live in smaller frame houses, or frame two-flats. Lawns are usually large, especially in front, and invariably well tended. At Christmas, quite elaborate Christmas trees are placed in large picture-windows, often especially cut in the front of the house for display purposes. These large neighborhoods, with their uniformly neat lawns, their brick houses in excellent repair, and their lower-middle-class status-symbols of awnings and Venetian blinds are both proud and cohesive. "Invasion" by an Italian-American or Polish-American family is cause for general alarm. "Invasion" by a middle-class Negro family leads to threats, some attacks, and eventual sale.

In this North-European middle-class and skilled working class culture, the family is stable and cohesive. In many cases, the family includes three generations, living in the same neighborhood but in separate residences. There is no doubt who is the head of the family. It is the husband and father. Yet the wife is in control of the house, of day-to-day child-rearing, and, in about 50 percent of cases, of the budget.

These families emphasize the acceptance of responsibility for oneself. Boys and girls are encouraged to work at stores, offices or golf-courses after school-hours, on Saturdays, and during the summers. Adolescents also learn to save their earnings and to help pay their own expenses, both in high school and college.

By their second or third year in high school, boys are expected to make their own decisions about hours of study, courses of study, dating, use of money and practically every aspect of their lives, except use of the family car. Girls, especially in middle-class families, are more dependent upon parents, but are taught to work, to look forward to marriage a year or two after high school, and to regard their life's work as that of keeping a house, cooking, cleaning, and above all else, rearing children. There is no cultural approval of either the "career girl," the "glamor girl," or the unmarried woman.

Thus, both the neighborhood culture and the example of the parents emphasize for the boys, the necessity and availability of a well-paid skilled, or white-collar job; of home ownership; of stable community; and of a cohesive family of one's own making. For the girl, the culturally taught goals are building a family, making a home and running its day-to-day operations, caring for the physical and emotional needs of the husband and children, and training the children. In this culture, the goals of adulthood are clear and definite. They are taught consciously and unconsciously to adolescents. For males, the chief emphasis is upon assuming economic responsibility and making one's own decisions. For females, unlike those in the upper-middle and upper classes, there is little or no ambiguity in the culturally defined goals for adulthood. The female is to furnish, clean, and operate the house, to bear and rear children, to manage the expenditure of money (in half the cases), and to nurture emotionally both husband and children.

D. Social and Emotional Development Within Adolescence.

Adolescence is organic, social and emotional stage of development, filling a decade of the life-span. Within this developmental period there exist three clearly observable substages. They may be labelled by age, or by school-level, viz: ages 12-13 to about 15 (the junior high-school age), ages 14-15 to about 18 (the senior-high-school age), and ages 17-18 to about 21 (the college age).

The social groups within adolescence are determined chiefly by social sanctions and cultural expectations, on the part of adult and adolescent societies. The empirical studies of adolescent groups by Carolyn Tryon, Havighurst and Peck, McGuire, Thompson and others have documented a hierarchy of age-groups within adolescence, each group having a distinguishable pattern of cultural behavior. As adolescents move from junior-high school to senior-high school to college, they are accorded increasing social and sexual privileges by adult society, but remain in adolescent status with regard to other behavioral systems. For instance, males between the ages of 17 and 21, the college age, have the rights of adults in sexual and informal social relationships, but most of them still have the status of adolescents in the occupational, economic and political systems.

Psychologically, in early adolescence the internal biological system is in turmoil. The image of his or her own body has been lost through the rapid changes in stature, weight and sexual organs and secondary sexual characteristics. The new body often is seen as dangerous, or as changing too fast or too slowly, or as being too big or too small (breasts, genitals) or as shameful. The sexual and aggressive drives, under control during middle childhood, now are surging into consciousness, often in the form of fantasies. These rebellious fantasies and drives arouse in the adolescent both recurrent fear that his inner restraints will be overpowered and chronic feelings of guilt.

His conscience is under attack from within, by an onslaught of new desires, and from without, by the ridicule of his childhood values by his peer group, which is in revolt against parental morality and "hypocrisy."

The rejection of parents as ideals leads to the search, during middle adolescence, for new ideal persons. These are not easily available in our society because of the scarcity of contacts between adolescents and adult society. The Y.M.C.A., the church, and a few such organizations provide some adolescents with new adult targets for identification. These sources, however, are relatively unimportant, for middle-class adolescents, as compared with the high school. One of the most significant indications of the important role of the high school for adolescents in this research was the fact that 66 percent of the males and 71 percent of the females reported that there had been at least one teacher in high school whom they had especially admired. This tie seems to have been emotional or social (rather than scholastic) for most of these students, since only 19 percent of the males and 17 percent of the females mentioned "studies" as their principal (first choice) interest in high school. Teachers, however, were not the chief identification-targets for only 10 percent of the males and 18 percent of the females chose a teacher as the person they had most desired to resemble in high school. Parents still came first for 29 percent of the males and 46 percent of the females.

Most students of adolescent-personality seem to have been so dazzled by the burst of sexual and aggressive drives at this age that they have not been able to see clearly the growing domain of the ego during adolescence. In the best theoretical work on the development of the ego during adolescence, Dr. Irene Josselyn has emphasized the great surge toward social and intellectual activity, the rapid widening of interests (extension of the ego rather than constriction) and the battle for autonomy, characteristic of the normal adolescent. The adolescent wants to test himself, to discover whether he has the strength, the ability, and the courage to face life, whether in the Army, or courtship, or in freezing weather without a coat! He is impatient to start his own ventures, and to stop parental figures from directing his life.

During most of middle and late adolescence, both males and females give evidence of powerful, at times Tamburlanian ego drives.

The chief characteristics of normal adolescents, in our society, in fact are (1) their revolt from parental dominance and (2) their organization of peer-group activities as an arena for their initiative, their competitive skills and social planning. These are high-level ego functions.

In the largest sense, the ego is that force in the psychic life which seeks to gain all the satisfaction and self-enhancement which is possible, and to avoid seeking that which is impossible. In early and middle adolescence, most of the ego forces are locked in a struggle with the sexual and aggressive drives to keep the expression of these drives within the limits of social reality. After the ego has done so by developing new defenses against these drives, by embracing new ideals and identifications and by adapting childhood ideals and identifications to the new inner and outer realities, most of its new-found energy is then turned, during late adolescence and early adulthood, to reality-gains in the occupational world, marriage, and social organizations.

The meaning of the apparently "sudden" maturing of our sample into behavior most of which was not predictable, upon the basis of their adolescent behavior, seems to be as follows: During adolescence, the individual is prevented from "finding himself," that is, from developing realistic behavior, self-direction, and commitment to an occupation and a spouse, by the operation of two major sets of forces. The first obstacle is within; it is his difficulty in controlling his resurgent sexual and aggressive drives. The second force delaying his "growing up" is the adult society's subordination of the adolescent and dampening of his ego drives by restrictions in the occupational, educational and organizational worlds. This period of basic emotional confusion and of frustration of the ego drives comes to an end for most middle-class adolescents when they finish college, and for most working-class adolescents when they complete high school. By that time, the ego drives, powerfully accelerated during early and middle adolescence, but deflected from their personal and social aims by the inner struggle for self-control and the external struggle against parental and socially enforced dependence, have attained an internal organization in which the ego drives no longer are involved chiefly in the battle for control of the sexual, acquisitive, and aggressive drives. At this very age, the adult society begins strongly to encourage, and often to demand the development of economic self-support and social self-direction. The basic ego goals, therefore, have now become available socially, at the same time that the powerful ego drives, no longer consumed in the struggle for self-control, are freed for the synthesis of the self-directing and self-enhancing functions of the ego, and for the achievement of manhood and womanhood.

E. Developmental Relationships Between the Parental Family and the New Family.

The major social change in the transition from late adolescence to adulthood is the individual's creation of a new family through his marriage. Social scientists in the past have believed that the young adult, in creating his new family, inevitably severs most of his social ties with his parental family. Our findings, as well as those of several other students of the contemporary American family, however, provide strong evidence that the social relationships between the parental family and the new family are maintained. In our sample, the relationships between the parental and filial families constitute a genuine system of social participation, resembling an extended, three-generation family. These relationships are not based primarily upon economic aid on either side; they consist entirely of inter-generational family-dinners, usually once a week, of holiday dinners and excursions, of parties on birthdays, of christenings, of other festival occasions and of frequent telephone conversations. Even more unexpected is our finding that both the husband's parental family and the wife's are included in such dinners and telephone conversations in about half the cases.

Such a pattern of extended-family relationships has been typical of the rural family in America, but apparently has been observed as a dominant pattern in the metropolis only in recent years. The old sociological finding that the metropolitan society consists largely of "nuclear" or atomistic, one-generation families, plus isolated individuals, living "anonymously," and lacking group-identity, certainly does not hold for our sample of young adults.

Since 91 percent of the females and 69 percent of the males in the 1952 senior class are now married, the processes by which these young adults organize their new families, learn the roles of husband, wife, father and mother, and relate to their parental families becomes a major problem of this study. The parental family and its culture were strongly conservative. The father was the head of the family, both in Catholic and Protestant groups. (There were very few Jews in our high school.) He had learned from his own cultural (parental) models and morality that he should make the final and ultimate decisions, chiefly prohibitive, concerning sexual and aggressive behavior and other basic moral questions--dating, hours to return home, use of the car, and the extent of education for his children. The husband-role also was defined culturally as super-ordinate to the wife-role since he was the chief provider, and the ultimate enforcer of morality and discipline. Husband and wife were not equals; in fact both the printed religious instruction concerning marriage, and the universal cultural emphasis upon masculine dominant stamped any husband who accorded his wife equal or greater voice in basic decisions as a weakling.

By the time our sample was born, however, this particular social group, consisting of about equal numbers of upper-working class and lower-middle class white parents, chiefly of German, Irish, or Scandinavian background, already had been forced, in the generation of the parents, to develop certain behavioral modifications of this basic cultural model. For instance, in the upper-working class half of our parental sample, most of the wives had to work. They had to work, that is, if they wished the family to buy a home, a piano, radio, electric refrigerator, vacuum clearner, car, awnings, picture-windows, Venetian blinds (as most of them did) and to save money for the rainy day which always came to working class families. Home-ownership, economic security (that is, money in the bank or building-and-loan association, or hidden away in the house, and life insurance), rather than the college education of children were the primary criteria of success and security. But the income of most workingmen and small white-collar men was usually insufficient in 1935-1936, when our students were born, to meet these criteria of security and "success." Therefore, the wife usually went to work. Six years later, when our students were in the first grade, World War II provided work for all women who sought it. The mothers of our students were clerks, typists, telephone operators, nurses, or machine-operators and riveters. From this maternal example, the overwhelming majority of the girls in our sample learned, as one of them told us, that "a woman should have some experience holding a job before she marries, at least two or three years. It teaches her she can hold her own. She also learns about the world and how different it is from what she thought in school."

The fact that the females in our parental sample worked, and contributed to payments on the house, the furniture and the children's clothing led to a modification of the structure and culture of the parental family. In "respectable" families of this group, women previously had not worked after marriage. They had been provided for by their husbands, so that they could devote their time to the care of the husband, children, and house. They looked down upon the Hungarian and Polish-American immigrant wives who worked in the stock yards. Our sample of German, Irish and Scandinavian descent had been in America a generation or two longer; for them, work outside the home no longer was respectable. It would have endangered the family's status. It also threatened the husband's dominant cultural position in his family and his social self-esteem. During the War, when our sample was 7-10 years old, it was necessary for the wife and mother to work in order to help meet the rising standards and the increasing cost of living, within their own social level.

As a result, a new pattern of family structure developed in which the woman had a larger share in all economic decisions, except the purchase of a car. Actually, wives made the budget and handled most of the husband's income in about half of these parental families. The husband no longer was the sole economic provider; no longer, as had been true previously in most working class families, were wives ignorant of the amount of their husband's bi-weekly pay check. Instead, since the standard-of-living goals steadily were being raised by the neighborhood group, and since only the combined incomes of both husband and wife could meet these criteria of "respectability," the budgeting and spending of income became either a joint responsibility, or the province of the wife.

The role of the wife as the protector and disburser of the family's income had a second moving force. In the working-class half of our parental families, it was a protective cultural defense against the chief dangers to the security of the working-class family, namely the husband's gambling and his expensive drinking on Friday and Saturday nights spent in taverns. To attain the goals of home-ownership and economic security, the wife in such families needed a method for controlling the wasteful habits of the husband. When she, herself, began to earn money and to help pay the monthly installments on the home and furniture, she gained a new economic role. She began either to share in the making of the family budget, or to control it and the spending of the family's income. In other respects, however, the roles of husband and of wife remained sharply differentiated. The man still was the chief provider; the woman was expected to keep the home running and to care for the physical and emotional needs of her husband and children. In brief, by the close of World War II, the parental family of our students had reached a stage transitional from the patriarchal family of the European type to the present American middle-class "cooperative" family.

Our young adults have established families of their own in which the cultural dogma and code are those of the "equality of spouses." According to this cultural ideal, new to upper-working and lower-middle groups, the wife expects to exert authority mutually and equally with her husband in all areas except those pertaining to his occupation and his activities with his male peer group. Our sample of wives also report that a good husband should provide for his family, and share in the rearing of his children.

At the same time--and this expectation is a cultural source of emotional conflict--the wives in our young-adult sample report that they expect their husbands to be emotionally supportive and nourishing to both their wife and children. This expectation probably is difficult for the husband to meet if he feels that his wife does not grant him authority similar to that once exercised by the husband's father in his family. That is, there probably exists some struggle for power between the new spouses, a struggle arising from the conflict between the husband's admiration of the authoritative role of his own father and the wife's desire to attain the new cultural ideal of a cooperative role. It is difficult to be nourishing toward the person who, one feels, is threatening one's cultural (i.e., "right") role.

The husbands report that they also expect the good wife, not only to take the chief responsibility for the running of the house and the rearing of children, but also to be emotionally nourishing to her husband and children. Furthermore, both husbands and wives report, in most cases, that they, themselves, should be emotionally supportive to their spouse.

The principal changes, as between the culture of the parental family and that of the new family, have been, first, the sharing by both spouses, in the new family, of the ultimate authority for child-rearing; and secondly, the shift in both the expected and the accepted role of the husband, from that of an authoritative and dominant, to that of a cooperative and supportive person. The emphasis by both husbands and wives upon the ideal of mutual emotional support is so overwhelming as to suggest that a new cultural ideal ("official view") is dictating this verbal behavior.

In this context, the role of the family, of social class experience and of post-high school events seem to us to overshadow the influence of the high school and the events of middle adolescence as significant factors in the process of transition to adult status in this society. In subsequent chapters we will attempt to present in more detail the data that brought us, somewhat reluctantly, to this conclusion. American society seems to us not to permit adolescents seriously to begin the transition to adulthood until after the relatively idle waiting period of high school is over. Adolescents are, in effect, a leisure class of which we demand little responsibility and a minimum amount of productive work. The society does not take high school academic work seriously; the impact of the high school experience upon transition to adult roles will dramatically increase when the society is prepared to ask its adolescents to engage in preparatory and productive work which has meaning for the society and the adolescent.

CHAPTER II

RESEARCH PROCEDURES AND TECHNIQUES

In American society, the late teens and early twenties encompass a period of transition from institutionalized socialization within the family and school to the assumption of adult roles and behavior. This time is also a transition period between the psycho-social phase of adolescence and that of young adulthood and involves modification in values and goals as well as the end of a long period of profound physical changes. A summary of the project is presented in the initial section of this report. The chapters which follow are intended to provide more detailed information about the procedures of this study to present additional information about the results obtained at both the high school and young adult levels.

This report is based upon a follow-up study of a high school senior class and is concerned with analysis of data gathered at two points in time, rather than with a pattern of sequential longitudinal data. It involves three major dimensions of human behavior: 1) achievement, 2) integration into the social aspects of the community, and 3) development of internal areas of experience: self-evaluation, satisfaction with accomplishments, and success in the more subtle aspects of cognitive and emotional behavior that are customarily grouped under the term "personality." The emphasis in this report is placed upon the achievement-success variables of the project and upon the relationships between school performance and later performance measures.

Although the follow-up phase of the study was organized and financed as a project in its own right, it represented a secondary phase of the total study. The initial contact with the study group was made in the early 1950's. At that time our interest lay in the relationship between academic performance, social facility and personality in adolescents, and an intensive follow-up study was not contemplated. However, we collected data from each of the 377 seniors in the class, and although these data were not ideal in scope and in techniques of measurement, they provided a base of information upon which to build a subsequent set of comparisons. The decision to re-study the senior class came several years later when information about the post-high school achievements and defeats of several members of the class became available to us. The follow-up began as a small project conducted by one of our graduate students. The response obtained was of such interest that it stimulated plans for a larger study of the original senior class.

The basic design of the project rests upon the analysis of relationships between behavior observed or reported in two points in time: the high school senior year, when the subjects were 17 or 18 years of age, and eight years later, when the members of the class were in their mid-twenties. There are obvious advantages that would have accrued from access to data at some point between these two ages, but this was not available to us on any systematic basis except as it was obtained by recall of our subjects later in the research.

A. The High School Study

As in any research which makes repeated use of the same subjects over a period of time, the nature of the project and the range of research possibilities are largely determined by the extent and character of the data collected at the initial phase of the program. A detailed account of the information collected from the original high school senior class is, therefore, a necessary basis for a full description of the total project.

The information gathered in the high school phase, and the measures derived from the original data sources, may be grouped into three broad areas of behavior: 1. academic measures; 2. measures of social facility and participation; and 3. measures of attitudes or internal states. More specifically, the measures from our high school study which were used as a basis for analysis in the follow-up project were these:

1. Measures of Academic Talent and Achievement

a. A composite measure of scholastic ability, based upon group administrations of two standard tests; the American Council on Education Psychological Examination and the Gamma form of the Otis Quick Scoring Mental Ability Test. A standard score for each subject was derived, based on a composite of the results of the two tests (see Appendix 1, Table 4). In reporting our findings, this score is usually called intelligence or referred to by the familiar symbol IQ.

b. Grade point average, indicating performance in academic subjects exclusively during the junior and senior years in high school. Course grades, omitting all non-academic subjects such as band, gym, typing, etc., were equally weighted and summed and a mean grade point average was obtained for each student.

c. Rank in class, based upon the school's records of performance in all courses taken over the four year high school period.

d. Disparity score, derived from a comparison of the subject's relative standing on the composite measure of scholastic ability and the four-semester grade-point average (see Appendix 1, Table 5). This measure was designed to indicate the degree of industry or effectiveness with which the subject dealt with formal classroom tasks and examinations. This score identifies the tendency to over-achieve or under-achieve relative to scholastic ability.

2. Measures of Social Facility and Participation

Information gathered in this area was intended to afford an estimate of the amount of social participation, rather than the nature of interpersonal relationships. The measures used were:

a. Membership in formally approved clubs and organizations within the context of the high school's official activities. Organizational membership ranged from intellectual groupings (Chess Club, the Chemistry Club) to much more social and "civic" groups. In our computations, the total number of memberships in such formal school associations was used to categorize subjects into high, medium, and low groups.

b. Membership in informal social clubs which were not recognized or approved by the school administration. These clubs were organized in the sense that they elected officers, held regular meetings, were known to the student body, and followed a set of regulations developed by the members. For computational purposes, membership in these informal clubs was scored on a dichotomous, Yes or No basis.

c. Mutual choice friends in the senior class. Social activities were indicated by responses to a questionnaire which included sociometric type items. These were used to obtain mutual choice friendship patterns among the class. The total number of mutual choice friends was used as a basis for grouping subjects into high, middle and low categories.

d. Membership in formal organizations outside of high school. This measure indicated the number of adult sponsored (Church youth groups, YMCA, etc.) associations in which the subject held membership. Because a high proportion of the senior class had no such memberships, this variable was scored on a dichotomous, Yes or No basis.

e. Membership in informal groups and clubs outside of school. The distinction between participation in cliques and memberships in informal clubs was sometimes difficult to make. The operational criteria adopted were that an informal club was one with administrative structure (president, etc.), held regular meetings, had a name and was not sponsored or supervised by an adult or adult organization. These clubs were occasionally informal high school clubs, most of whose members had graduated.

f. Teachers' ratings on social ability of the high school class. As an independent, though not necessarily more accurate, measure of the social facility of the class members, several teachers were asked to rate each senior that they knew personally. The ratings (on a 1-4 point scale) indicated the teacher's opinion of the social adeptness and success of the student. Teachers' ratings were averaged for each subject to obtain a perceived sociability score.

g. Popularity votes by peers, was derived from a questionnaire administered to the high school class which asked each senior to list the names of his classmates whom "your class would pick as The Most Popular." The distribution of responses showed that almost half the class received no votes. The distribution was divided into three divisions: those who received no votes, those who received 1-9 votes, and those who received 10 or more votes.

An attempt was made to summarize these measures into a single social index. The statistical and methodological problems involved in an effort to combine measures using different scales, based on quite different behavior, made this a highly questionable procedure. In addition, since there was a high proportion of the class on whom no data were available for one or more measures, this attempt was finally abandoned. Consequently, throughout this report, these measures will be used as individual variables.

3. Psychological Measures of Self-Evaluation and Attitudes.

The initial testing schedule included a group-administered Murry Thematic Apperception Test, an Incomplete Sentence Test and a number of questions which probed the student's motivation for post-high school achievement and his feelings about his high school experience. Of these various measures, only the TAT was utilized in the follow-up study. The cards of the TAT that were used, and the measures which were derived from the TAT protocols, are described in a later section.

The follow-up study was planned as a basis for an examination of the high school antecedents of adult performance. The central thrust of the adult phase of the project was the attempt to discover and understand which social, emotional and psychological factors in adolescents of high-school age may be indicative of later achievement or failure in adult roles and responsibilities. Although a considerable body of data is available dealing with the relationship between high school grades and academic achievement in college, there is relatively little research which attempts to relate the primary dimensions of adolescent behavior to adult performance. There is a considerable range of theory which suggests that success in social, psychological and academic areas would tend to create in the adolescent a feeling of confidence and re-inforcing assurance that should result in more successful mastery of the psycho-social issues of adolescence and of the demands of young adulthood. This attempt to relate behavior during high school to behavior in young adulthood was one of the focal points of the project.

A second major point of approach in the study was the attempt to increase our understanding of the social and psychological processes of development in the transition from adolescence to young adulthood. The relative inadequacy of research and knowledge about this particular developmental phase has already been noted. The importance of developmental processes during this phase and their impact upon the educational institutions and endeavors is readily apparent and will be of increasing importance as the number of college-bound youth increases.

An additional opportunity presented itself in this project through the fact that about a third of the males and three-fourths of the females moved directly from high school into jobs and did not attend college. This group afforded data on the processes of transition to adulthood for a non-college population--a group about which our knowledge is very scanty.

The third major focus of the study was to gain additional information and insight into the life styles of urban young adults and to examine the ways in which they cope with the demands of adult roles.

B. Design of the Follow-up Study

With these objectives in mind, it was decided that an attempt should be made to contact as many of the original class as possible. However, the total amount of data to be obtained from each subject was so great that a decision was made to obtain certain minimal information from as many as possible and extensive information from a small proportion of the class. This proportion was to be selected to represent, in several important respects, the total senior class.[1] The extent to which this follow-up sample represents the original class on one variable--occupation of father--is presented in Table 1. Comparisons of the two groups on other variables are shown in Appendix 1.

One of the central problems in designing the instruments of the follow-up study was the attempt to obtain data that would be comparable to data obtained in the initial study. It was decided that information should be gathered in the three areas already described--work achievement, social and psychological--even though

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[1] There were 26 Negro members of the graduating class. Since the process and problems of transition to young adulthood are obviously different in significant ways for Negro adolescents than for white adolescents, it was decided not to include them as part of the follow-up study.

TABLE 1

Comparison of Total Senior Class and Follow-Up Groups, by Occupation of Father

Father's Occupation*	Total Class N	%	Interview Sample N	%	Mail Contacts N	%	Total Follow-up N	%
Major responsibility-large firms; professions 1	2	0.6	1	0.6	0	0.0	1	0.4
Major responsibility-small firms; professions 2	29	8.2	15	8.8	4	5.4	19	7.8
Minor responsibility	75	21.3	35	20.6	13	17.4	48	19.6
Supervision of manual and white collar workers	118	33.6	61	35.9	25	33.3	86	35.1
Skilled trades	101	28.7	52	30.6	25	33.3	77	31.4
Semi-skilled trades	20	5.7	6	3.5	7	9.3	13	5.3
No information	6	1.7	0	0.0	1	1.4	1	0.4
Total	351	99.8	170	100.0	75	100.1	245	100.0

*See Appendix 1, Table 1, for a more complete description of these categories.

the instrument and questions used would not be identical. The intent of this decision was that the study should deal with comparable --rather than identical--questions and techniques. The one exception to this general policy was the decision to use the Thematic Apperception Technique as an instrument of psychological evaluation, utilizing the same cards of the TAT set that were administered to the research groups in high school.

The character of the follow-up study was, by necessity, based on individual contacts and an interview situation. While the data reported here occasionally include a number of persons whose responses were obtained by mail on a questionnaire, most of the data on which this report is based was elicited in face-to-face interview situations. This is a methodological consideration that must be kept in mind in evaluating the results obtained. With this data-gathering situation defined by the nature of the situation, the research moved into a pilot phase which served as a preliminary step to decisions involving the selection or devising of research instruments.

The pilot phase of the study consisted of detailed interviews with 60 young adults of our research group, roughly equally divided between men and women. These interviews were recorded on tape and included detailed information about the experiences of the individual members of the group since high school graduation.

Although the interviews were intended to be freely exploratory, the interviewers were instructed to inquire particularly into the work experiences and occupational choice of the men, into the decisions and events leading to choices regarding marriage and residence and into the social activities of the subjects. The interviewers also encouraged the subjects to talk about changes since high school or those which followed a particularly significant developmental event such as marriage, first job and parenthood.

On the basis of staff conferences about these interviews, a guided questionnaire was prepared to structure the information into more strictly comparable points of discussion. This questionnaire included a number of questions which were of a multiple-choice type as well as a number of open-end questions. In addition to the interview, the data-gathering session included administration of a semantic differential and a TAT. The information obtained from each subject of the intensive sample may be summarized in categories roughly comparable to those of the earlier project.

1. Measures of Work Achievement and Social Prestige

Information gathered in this area of behavior was intended to reflect success as defined in the society--the acquisition of prestige in the community and the development of earning power. The specific measures involved were:

a. Level of Occupation.

This was defined in terms of a scale of occupational prestige based upon the categories used by Warner (42), modified for use in a metropolitan region by McCall (104). The description of these categories appears in Appendix 1. For married women, occupation of husband was used.

b. Income.

Categorized both as income of principal breadwinner and as total family income in five hundred dollar increments from two hundred to more than six hundred dollars per month.

c. Social Mobility.

Social mobility was defined as social status relative to social status of father at the time of the follow-up study. For married women the comparison was based on husband's occupation, and on own occupation when the woman was single.

2. Measures of Social Participation and Involvement in the Community

These measures attempted to assess both informal and formal social activity on several points.

a. Membership in Formal Organization of the Community.

These memberships included church, lodge, civic and other service organizations.

b. Membership in Informal Social Clubs.

Included here were organizations primarily social in nature. For example, a number of the women in our group still participated in clubs that began in high school. This was also true of the men but to a lesser extent.

c. Range and number of Informal Social Activities.

Questions on this topic were designed to obtain information about the social life of the respondent in a typical week. For married subjects, these inquiries dealt with the joint participation of wife and husband in social activities and events.

d. Interaction with Friends.

An attempt was made to obtain information that could be compared with the data on mutual choice friends and other friendship choices in high school. Although it was not feasible to obtain mutual choice friendship patterns, the interview dealt in considerable detail with the history of friendships and the frequency and nature of activities, in order to get something more than a casual listing of friends.

e. Interaction with Family of Orientation.

The concern of the study upon the process of transition to adult roles led to the collection of information about interaction of our subjects with their parents and in-laws.

3. Measures of Psycho-Social Responses and Adaptation to Young Adulthood

The transition from adolescence to young adult roles and the new experiences that our subjects have had since high school graduation are of profound emotional significance to them and are of great research and theoretical relevance to the objectives of the project. Our techniques for gathering data relating to internal states ranged from projective devices to direct questions asking for deliberate self report. In addition, each subject was rated by the interviewer. The methods used are described below.

a. Direct Self Report of Achievement and Satisfaction.

As part of the interview, each subject was asked to rate himself on his satisfaction with his achievement in three areas: work, social activities and family. In addition, each subject was asked to rank his own achievement in relation to that of his peers.

b. Examination of Self-Concept Data Based upon Semantic Differential Rating Scales.

Following the work of Osgood on the semantic differential technique (118), a list of 25 word pairs was used to obtain the subject's evaluation of himself at the present time, his evaluation of himself as he was in high school and of himself as he expects to be in five years. In addition, each subject was asked to rate his parents, his peers and to describe himself as he would like to be.

c. Projective Material Elicited by the Thematic Apperception Test.

This procedure gave us a replication of an earlier testing with the group. The TAT presents social and interpersonal implications for most subjects. The responses these pictures bring forth tend to revolve around emotional and interactional problems characteristic of life circumstances and, as such, are relevant to the research concern of the project.

d. Interview Ratings.

After the final interview with each subject, the interviewer rated the respondent on a global scale which indicated the extent to which the subject had completed the transition from adolescence to young adulthood. This rating scale was based on the most prominent differences between adolescence and young adulthood in our society. A decision to proceed with a rating of this type was made only after it was apparent, from conferences and from agreement checks among several interviewers, that there was essential consensus about the ratings assigned.

C. The Plan of Data Analysis

With the wide range of information available for each subject, and the extensive number of responses from each subject, the task of data analysis became one of selection among several alternatives. Even within the primary focus of the study, a number of useful lines of data treatment and interpretation could be pursued. The detailed examination of a single case and the insights offered by case analysis of data argued for a technique that would permit the presentation of types of success and failure, of transition, and of adaptation to young adult roles. However, the necessity of dealing with a group of more than one hundred and fifty cases, all different in some important respects, made this approach exceedingly cumbersome and difficult.

The line of analysis we have chosen has two features. The first of these is the use of measures of central tendency and of association among the variables included in the study. The second is the definition of sub-groups within the sample and the examination of their characteristics in comparison with other sub-groups. The analysis of high school and young adult characteristics of high achievers in high school is an example of this approach.

CHAPTER III

ACHIEVEMENT IN ADOLESCENCE AND YOUNG ADULTHOOD

A. The Correlates and Outcomes of High School Academic Achievement

Scholastic success is influenced by such a variety of complex factors that it is relatively difficult to examine school achievement in the perspective of the major areas of behavior to which it is related. Although academic achievement is one of the most frequently and thoroughly investigated areas of education, most of the studies of school performance relate achievement to a small number of cross-sectional variables and lose the advantage of a longitudinal and multidimensional context.

The study described in this report attempted to achieve a more holistic view by examining the relationship of academic achievement to various realms of behavior--social, psychological, occupational and family--at each of two points in time. These relationships were investigated in two ways: 1) by the isolation of criterion groups which were then compared on relevant variables; and, 2) by the use of correlational analysis to obtain an idea of the covariance of specific variables.

There is some evidence in the literature of a positive relation between academic achievement, usually on the college level, and several adult performance variables, especially income (18, 29,90,92,93,94) and "life success" (12,35,51,89,115,149). Life success is generally defined to include financial success. On the other hand, many studies find no such association, or find an inverse relationship (23,,128,27,83,82,101,102,112,129,147,53). However, a critical evaluation of these apparently contradictory findings must take into account that the various studies are not comparable. Method, age level of the subjects used and definition of financial or life success were so diverse that we might well be more startled if the conclusions were similar. Grade level in these studies included elementary school, high school, trade school, college and graduate school. Financial and life success were garnered from such diverse realms as listings in Who's Who, ratings by fellow alumnae of one's university, amount of salary, source of income and occupational prestige. Very few of the studies used control groups; several reports were mainly anecdotal. Few of the studies controlled for IQ; fewer controlled for social class differences.

Many other studies have shown a relationship between academic achievement or successful performance in later life and social participation in school (8,110,133,22,125,15,17,71,64,62,74, 106,108,121,122,137,140,145,155,110,58). Again, no relationship, or an inverse association, was reported in several studies (3,45, 73,26,22,36,84,47,131,148,132,39).

In the realm of psychological variables, the most frequently used measure was the MMPI (66); the scales of which were correlated with academic achievement. Collectively these studies (2,16,82,88,135,146,160,58,37) picture the achiever as being somewhat quiet and nonassertive, withdrawn, having "feminine" interests, yet well-adjusted and relatively low in total amount of social and psychological deviancy.

Utilizing the Rorschach, several studies (8,77,107,109) concur that those who were outstanding in high school academic achievement were better "adjusted" and more aware of their environment than were the nonachievers. However, Liebman (95), Crosby (28) and Kulick (88) found no such connection between academic and psychological variables.

Research studies using the Kuder Preference Test (52,88,126), the Johnson Temperament Analysis (152), the California Psychological (136), the Strong Vocational Inventory (11,16,61), a Q-sort (45) and other techniques have come up with rather mixed (and sometimes conflicting) results. Because of lack of consensus, not even a tentative conclusion can be drawn from this section of the literature.

In the area of the family, research relative to academic achievement has been limited primarily to rather young children, often in terms of child-rearing practices. These studies generally agree that low achievement is associated with parental (usually maternal) rejection, overprotection, pressure from the parents and/or "babying" (4,13,14,21,30,67,68,96,111,116,127,133, 141,142,144,159). Other studies (6,53,80,144,156) generally concur in finding that somewhat less restrictive, more permissive, more democratic child-rearing practices and home relationships are associated with a relatively high level of achievement. Cook (25) and Weitz (157), respectively, found high achievers less often to be middle children and eldest children. Kimball (86) found underachievers to have had poorer relations with their fathers. Leibman (95) found high achievers to be higher in the area of family adjustment.

On the basis of this literature, it seems reasonable that the individual student who is intelligent and who conforms to institutional requirements for academic success will probably be successful in other respects also. Although not based on it, our view coincides with that of Havighurst (69,70). In his discussion of developmental tasks, Havighurst theorizes that the successful encountering of one such task (for example, the development of intellectual skills) tends to be associated with a successful encountering of other tasks (for example, achieving and maintaining mature relations with agemates of both sexes). This view has been supported empirically. Thus, we would expect that successful performance in the academic realm should be associated with success in the occupational, social, psychological and family spheres.

The period of life beyond high school and before the prime of life, here called young adulthood, is curiously unstudied. Little is known about the transition between the termination of school and economic independence, and the leaving of the family of orientation and starting a family of procreation. Perhaps the storminess and glamour of adolescence has diverted us from concern with this transition.

The examination of achievement in young adulthood is not only of intrinsic value, but also adds to an understanding of academic achievement by supplying a second anchor point in time, a second perspective. A close examination of the process of transition is beyond the scope of this study, since it is not truly longitudinal --dealing with but two points in time. Hopefully, however, some features of these transitions should become more clear.

Specifically, this section includes a discussion of the data which deal with associations among academic success and occupational, social, psychological and family variables.

1. Measures of High School and Adult Achievement.

High school and the adult job represent competitive systems in which the individual person is, to a degree, rewarded relative to his ability and motivation to succeed. The value placed upon achievement will, of course, vary greatly with different high school and community sets of values, but both school and job situations offer opportunities to gauge, in a gross fashion, the inclination and capacity to succeed at significant tasks presented by the society. Although the skills required in academic performance and occupational achievement are not necessarily identical, they both represent areas of work, and it is appropriate to inquire about the relevance of performance in the classroom and success in the adult occupational world.

As described in Chapter II, three measures of high school academic achievement were available: grade point average, rank in class and disparity. Disparity was based on grade point average relative to achievement as predicted on the basis of scholastic aptitude tests. Rank in class represents the relative standing of the individual, based on grades from all four years in high school in all courses. The four-semester grade point average deals with grades from the subjects' junior and senior years in the academic subjects only (science, math, and language, as opposed to music, physical education, shop, and home economics courses). The extent to which these measures represent different behavior is indicated by the size of the correlations between four-semester grade point average and rank in class for the total sample and for the relevant sub-samples.

For the total sample the correlation between these two variables was .54 (p = less than .01).[1] Further, the correlation was a great deal higher for the females than for the males. Whereas for the females the correlation was .74, for the males it was .40 (.001).

What these correlations suggest is that, for the males, performance over all courses is not highly related to performance over academic subjects in the last two years in high school. Perhaps students are differentially motivated to achieve in the academic and nonacademic courses. Or, perhaps, nonacademic courses may be graded on the basis of factors different from those used in academic subjects.

Also, it appears that the performance of females is more consistent over courses and over time than is that of the males. We may also speculate that criteria for grading performance may be different for the two sexes.

Capacity as measured by IQ was more closely related to one of the criterion measures than to the other. Both these performance measures were related to academic ability, as indicated by achievement on intelligence and scholastic aptitude tests, but not to the same extent. The correlation between tested mental ability and grade point average was .56 (.01); the relationship with rank in class was considerably lower, at .34 (.01).

Once again there was a large sex difference in the correlations. Whereas the correlations between four-semester grade point average and IQ were the same for females and males (.57 vs. .60), those between rank in class and IQ were quite different for the two sexes (.52 for the females, .23 for the males, a highly significant difference (.001). Thus we find that females are not only more consistent over time and across courses in their academic performance, but that their performance is more consistent with their capacity.

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[1] Throughout the text, proportions given in parentheses after correlation coefficients and other statistical expressions will refer to the probability that a coefficient or finding of the given magnitude is a random or chance event. Because the size of groups and sub-groups vary, a coefficient of a given size may sometimes be apparently significant, sometimes not.

2. The Relation of Academic Achievement to Non-Academic Variables.

a. Social Variables and Academic Performance

(1). High School Sub-culture.

Although there is some debate as to the nature and importance of adolescent peer culture, Fielder (46) and Coleman (24) give fairly good evidence that the student population of a high school develops a network independent of the adult community and the high school administration. These sub-cultural values arise in the close day-to-day interaction of the group and are expressions of age and generational differences. Since peer approval in certain situations is as important as, if not more important than, that of the teacher and parent, it is not surprising that the adolescent turns to peers for guidelines by which to define certain aspects of social reality. One way for us to estimate the relationship between the sub-culture and academic achievements is to examine those subjects whose strong commitment to the sub-culture can be measured by membership in the central organizations of the peer group: student social clubs which are formally unrecognized though informally sanctioned. There was a low but significant correlation (.23) between membership in these informal social clubs and grade point average on academic subjects. However, there was a great deal of variance in scholastic performance among the several clubs. In fact, it was not membership or non-membership in social clubs so much as the character of the club that was related to academic success. In certain groups there was a tendency for members to achieve up to ability as shown on tests; in others, the academic performance was consistently lower.[1]

(2). The Relation of Academic Achievement to Social Behavior Within the High School Context

These social activities were outside the sponsored and supervised activities of the high school, officially disapproved because of their resemblance to sororities and fraternities which are specifically outlawed in Illinois. It seemed possible, then, that participation of the students in the formally approved and supervised social and scholastic clubs might indicate a greater compliance with the values of the school and lead to higher scholastic performance. However, our findings show an even lower relationship ($r = .14$) between academic achievement and various measures of participation in the sanctioned social activities of the school (Tables 2,3).

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[1] These results are reported in Haggard, E. A. Intra-Class Correlation and the Analysis of Variance, Dryden Press, Inc., New York, 1958, p. 15.

TABLE 2

Academic Achievement and Formal Social Activities in High School (Percentages)

Membership in Formal School Association	Rank in Class					
	High		Middle		Low	
	N=33	%	N=65	%	N=73	%
			Males			
High*		36.4		15.4		19.2
Middle		42.4		44.6		49.3
Low		21.2		40		31.5
			Females			
	N=74	%	N=71	%	N=23	%
High		29.7		23.9		13.0
Middle		51.4		29.6		26.1
Low		18.9		46.5		60.9

*High--four to seven memberships.
Middle--two or three memberships
Low--zero or one membership.

Since our data show little distinction between approved and non-approved social club membership in relation to scholastic performance, the relationship of academic performance with more general measures of social ability was examined. Two measures, number of mutual-choice friends in the senior class, and teachers' ratings of apparent social ability, were used. The correlations were significant but low between grade point average and number of mutual choice friends (.23) but somewhat higher between teachers' ratings and grades (.56).

These correlations indicate that the amount of social interaction in school-based and approved social activity is somewhat related to success in class. The picture presented by these correlations of the high academic achiever as being more successful in social relating (or at least more socially active) is consistent with several reports from the literature.

TABLE 3

Social Ability and Academic Success (Percentages)

Number of Mutual Choice Friends (1952)	Rank in Class		
	High	Middle	Low
		Males	
	N=33	N=64	N=70
High*	3.0	4.7	2.7
Middle	33.0	15.6	8.6
Low	63.6	79.7	88.6
		Females	
	N=73	N=68	N=23
High	17.8	11.8	21.7
Middle	30.1	20.6	30.4
Low	52.1	67.6	47.8
Teachers' Ratings	Rank in Class		
	High	Middle	Low
		Males	
	N=33	N=63	N=71
High	69.7	20.6	8.5
Low	30.3	79.4	91.5
		Females	
	N=76	N=71	N=23
High	55.3	32.4	13.0
Low	44.7	67.6	87.0

*High--seven to nine friends.
Middle--four to six friends.
Low--zero to three friends.

However, before these results are generalized too far, it may be well to examine more closely the nature of this relationship. The correlations discussed indicate that social participation within the school and/or the school setting is related to academic achievement. This does not necessarily mean that social ability, facility, or interaction in a broader context is related to achievement. Social activities within the high school group may not accurately represent either the range or the amount of social activities. In addition, the nature of social interaction outside of the school context may be of a different character than school-based interaction.

In order to determine whether social participation itself or social participation in school was the crucial variable related to academic performance, other measures of social facility were examined. These measures were derived from a question which asked the subjects to list their best friends. The total number of friends listed by each individual was taken as an estimate of social participation. This total was then analyzed both as to number and proportion of those friends who were in attendance at this high school at the time of our subjects' senior year.

The proportion of "best friends" in attendance at the high school was taken as a measure of the degree of social participation within the school setting.

The sample was broken down into approximate quartiles according to rank in class. The quartiles were compared as to (a) number of friends listed and (b) proportion of friends in school. The total number of friends listed by the various groups was not significantly different (Table 4). The proportion of friends who were attending the high school, however, did differentiate the groups. Those in the first quartile in rank in class had more friends in the school than did those in the second quartile (p was less than .10) and the first and second quartile combined had more friends and a larger proportion of friends in the school than did those in the third and fourth quartile (p less than .01). (See Table 4.)

That is, those who were high academic achievers had more friends attending the high school and a larger proportion of their friends attending the high school than did the low achievers, in spite of a lack of difference in total number of friends claimed.

From this it appears that it is not solely social participation that is related to academic performance, but participation with classmates in the school setting. Such a relationship suggests that those individuals who accept their classmates as their reference group also tend to accept the values of the school. It is these individuals who are the most socially active in school and who achieve most highly in the academic sphere.

TABLE 4

Academic Achievement and Extra-School Social Participation

Rank in Class Quartile	Number of Friends Listed (percentages) 0-5	6-8+	Proportion of Friends Attending High School
1 (High)	45	55	.64
2	51	49	.43
3	45	55	.38
4	53	47	.46

Obviously, these results do not indicate a causative relationship between the two sets of variables; it is possible that each was caused by previous or external influences. Rather, what is indicated is a predictive relationship whereby academic achievement may be predicted on the basis of patterns of social behavior.

(3). Social Class.

The influence of social class on academic achievement is well documented. A number of studies on samples with varying social composition have reported a relationship between social class and both academic achievement and tested IQ (34.41). However, for our sample, which was predominantly from upper working class and lower middle class levels, the relationship between class background and academic achievement was relatively low (Table 8).

The restriction of social class range may have attenuated the usual association; additional factors might also have had some influence. Students from working-class homes provide a disproportionately large share of the drop-outs in metropolitan areas. These are also the students whose scholastic performance was mediocre or poor. The self-selection of academically better students from working-class homes possibly influences the correlation that appeared in our data. A similarly low correlation was found between the social class level of parents and scholastic ability as measured by standard IQ tests.

b. Psychological Variables and Academic Performance

The history of educational and psychological research includes many attempts to relate academic achievement to personality measures. Although the results of research in this field are not entirely consistent with one another, it seems beyond dispute that psychological factors of several kinds influence scholastic performance. While a formal assessment of psychological characteristics was not the central purpose of the project, it is of interest to examine the relationships that were obtained between the psychological measures available and academic performance.

Two psychological variables were derived from responses to the thematic apperception technique, a projective instrument utilizing subjects' responses to semi-structured pictures of a primarily social interaction type. These measures were developed by Dana (32) and by Nawas (114). Both the measure developed by Dana, here called ego functioning, and that used by Nawas, here called ego complexity, involve the individual subject's ability to perceive stimuli accurately, to recognize the salient features of the environment and to organize and integrate experience.

A successful and efficient completion of the tasks presented by the TAT as reflected in high scores on the ego functioning scale demand that the individual remember the instructions and use his memory and experience for the most appropriate words and images; it requires the respondent to adapt himself to, and become involved in, the task at hand; it calls for accurate perception of the conspicuous features of the stimulus; it requires the individual to maintain his objectivity when dealing with those stimulus situations which are emotionally threatening; it demands that the subject integrate, make sense of, and structure the discrete parts of the stimulus; and, finally, it requires that the subject organize his narrative response in a coherent, continuous, and logical manner.[1]

In carrying out these operations, a number of ego functions are called into play in varying degree: remembering, imagining, thinking, perceiving, getting involved in and adapting to the task, organizing, maintaining objectivity, and integrating. This combined score can therefore be considered an index of the individual's ego sufficiency in coping with these demands--demands which are presumed to be related to those of everyday life.

That this type of ego functioning should be significantly related to academic achievement was indicated by the literature. This prediction was confirmed for the total sample of our study. Ego functioning was found to be significantly associated with rank in class (p less than .03) for the total sample.

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[1] These measures are described more fully in Appendix 9.

A second measure derived from the TAT was ego complexity. Though related to and overlapping ego functioning, ego complexity indicates sensitivity to external surroundings and events, to ego expansion as opposed to ego constriction. Ego complexity deals with affective differentiation and is associated with flexibility and sensitivity to interpersonal nuances. It is also associated with sensitivity to the events and intricacies of the physical surroundings.[1]

It was also predicted that since ego complexity represented a measure of ability to perceive the environment accurately and meaningfully, it would thus be related to academic achievement. Confirming the prediction, ego complexity was found to be associated with rank in class (p less than .01).

c. Sex Differences.

While several studies have reported that boys and girls differ in scholastic achievement few have examined sex differences as patterns of performance in high school. Yet, aside from age, sex is probably the most powerful single predictor of behavior. It seems crucial that patterns of performance, as well as amount of success, be examined for the sexes separately.

The females in our population out-performed the males in terms of high school academic achievement as measured by grades (Table 5).

TABLE 5

Sex Differences in Academic Achievement
(Percentages)

Rank in Class	N=173 % Males	N=171 % Females
High	19.1	44.4
Middle	38.2	42.1
Low	42.8	13.5

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[1] For a fuller explanation of both ego functioning and ego complexity, see discussion of psychological changes in the transition from adolescence to young adulthood, Chapter VI.

The females also received higher grades in the academic courses (2.44 of a possible 4.00 for the females, as opposed to 2.06 for the males). Most conspicuous was the difference in achievement relative to IQ; females showed much more scholastic overachievement than did the males (Table 6).

TABLE 6

Sex Differences in Academic Over- and Under-Achievement (Percentages)

Disparity	Males N=170 %	Females N=171 %
Overachiever		
1	11.8	27.5
2	18.2	32.2
3	9.4	16.4
4	24.7	15.2
5	35.9	8.8

In our sample, the correlations between IQ and four-semester grade point average for the males and the females were almost identical (.60 vs. .57, respectively). However, the correlation between IQ and rank in class was significantly higher for the females (.52) than for the males (.23). The correlations indicate that females' academic achievement is much closer to capacity over time and over courses than is that of the males'.

In addition to the observed superiority in achieving to capacity, the females also perform more consistently in both academic and non-academic courses. The correlation between grade point average (academic courses only) and rank in class (all courses) was much higher for the girls than the boys.

Our results also show that girls conformed more readily to the pressures exerted by their parents than did the boys. The parental social class was more highly related to academic achievement for the females than for the males. The correlation between social class background and four-semester grade point average was .29 ($p = .05$) for the females while for the males it was .00. The correlations between social class background and rank in class were .33 ($p = .05$) for the females and .06 for the males.

There are other differences in our sample between boys and girls in the extent to which they accept parental and school pressures toward academic achievement. These differences, which are indicated by the tendency of boys to underachieve, are related to social participation. There is a much stronger correlation between rank in class and proportion of friends in attendance at the high school for the males (r = .34) than for the females (r = .11). This difference may be explicable in terms of girls manifesting a higher acceptance of parental and school pressures. Those boys, however, who accept their in-school peers as close friends also accept the demands of the school and achieve highly and consistently.

The sub-culture of the high school we studied was not academically oriented. In the follow up interview 54.2 percent of the subjects stated that either sports, dating, or social participation was their primary focus of interest in high school, while only 19.4 percent listed studies in this context (Appendix 7). Even so, the relationship between academic achievement and proportion of friends in high school shows that those who were integrated most completely into the high school sub-culture were the high achievers. Further, the larger the part played by the high school sub-culture in the subject's total school participation, the more highly he achieved.

Nor is acceptance of the high school sub-culture related to academic performance through some intervening variables, such as intelligence or social class background. In fact, for males, the acceptance of in-school peers as close friends is more closely related to academic achievement than is either social class background or IQ.

Thus, the high school sub-culture, while not sharing completely the values of the school administration, is apparently responsive to demands of the school. In spite of the lack of academic orientation of the high school sub-culture, integration of the individual into high school sub-culture is related positively to a high level of performance. Or, perhaps, the influence is a negative one, such that integration of the individual into groups other than those in the high school leads to acceptance of fewer of the demands of the school and the acceptance of a primary source of gratification outside the school allows the individual more autonomy in the school setting.

In any case, it is clear that there is much more variability among the boys than among the girls in the extent to which demands of the school are accepted. Conformity of the girls to these external pressures is generally high. Conformity of the boys is considerably lower and is apparently related to amount of gratification accepted from sources outside the school.

3. High School Scholarship and Young Adult Achievement.

Although the relationship of academic success to non-intellective activities during high school gives some perspective of the place and prestige of scholarship in the total high school context, the more important issue is the long-term consequences of academic achievement as shown by later post-high school performance. The central questions are, first, whether absolute performance, as reflected in grades in high school is associated with success in young adulthood; second, whether mental talent as indicated by IQ and scholastic aptitude tests is related to later achievement; and third, the extent to which industry or achievement relative to ability is related to subsequent success. In short, the question deals with the relative effectiveness of achievement, ability, and hard work.

The measures of success in young adulthood deal primarily with areas of occupational, educational and social achievement, with emphasis on success in occupational areas. Our findings show that academic achievement in high school is predictive of occupational success (defined by prestige level) in young adulthood for the total group. Grade point average correlated with occupational level (.43), level of education ultimately attained (.41), and young adult social class (.45). The corresponding correlations with rank in class were also highly significant, though somewhat smaller. IQ was also predictive of young adult achievement, and was intermediate in the correlations between four-semester grade point average and rank in class. The correlations were significant between IQ and occupational level (.31), level of education (.37) and social class (.33).[1]

It is of significance that grades in the academic subjects in the junior and senior years were more predictive of young adult success than was native ability (as estimated by tests). Although grades often reflect non-academic variables, they provide the single strongest predictor of later performance of the high school variables used.

On the other hand, young adult success as measured by salary was completely unrelated to grades (r = .10), rank in class (r = -.02), and IQ (r = -.11). Such lack of relation between ability as measured in high school and income in young adulthood is consistent with the findings of Dugan (38). The incomes as reported by Dugan were somewhat depressed in comparison with our sample; but insofar as the methods were similar, our results support his.

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[1] The significance of these relationships will be qualified later in this chapter in an analysis of the effect of post-high school experience upon adult achievement.

TABLE 7

Rank in Class and Social Status of Parents
(Percentages)

Rank in Class	ISC*		
	High	Middle	Low
	N=17 %	N=60 %	N=82 %
		Males	
High	82.4	50.0	36.6
Middle	17.6	33.3	36.6
Low	0	17.7	26.8
	N=20 %	N=66 %	N=75 %
		Females	
High	30.0	18.2	17.3
Middle	35.0	22.7	30.7
Low	35.0	59.1	52

*High status refers to an ISC score of 37 and lower; middle status categories cover a range of 38 to 51; low status includes all scores above 52. For procedures used in calculating ISC, see Appendix 1.

Our data show a difference between males and females among the interrelationships of high school and young adult performance. One of the differences is the relationship of social class to achievement. Whereas social class background of parents is more highly related to school achievement for girls, young adult social class is more highly related for males. These relationships are presented in Table 7. The correlation between the social class in young adulthood and grade point average was .40 ($p = .01$) for the females and .59 ($p = .01$) for the males. This difference was significant at the .045 level.

TABLE 8

Academic Achievement in High School and Young Adult Social Status

Social Status (ISC)	RIC					
	High		Middle		Low	
	N	%	N	%	N	%
High	44	50.6	18	19.6	8	14.8
Middle	24	27.6	39	42.4	19	35.2
Low	19	21.8	35	38.0	27	50.0
Total . . .	87	100.0	92	100.0	54	100.0

From these data it appears that females are more dependent upon social class and hence values, norms and beliefs of significant others (parents, spouse) than are males.

Further confirmation is given to this argument by the association between grade point average and social mobility. For females, the correlation was .12, while for the males it was .41, a highly significant difference. The correlations between social mobility and rank in class were in the same direction although low. Still further, there was no significant association between IQ and social mobility for either males or females. Scholastic overachievement relative to IQ (disparity or industry score) is more predictive of later success (upward mobility) for the males (.22) than for the females (-.06).

It should be pointed out that the young adult social class of the married females was dependent upon that of her husband. Thus different variables intervene between high school performance and young adulthood for the males and for the females.

It may be particularly significant that grade point average is consistently more highly related to young adult achievement than is IQ. In spite of the various social and peer group value pressures against intellectual achievement, those who do achieve in high school tend to be the ones who also succeed in young adulthood. It is those very individuals who can withstand the pressures of the high school sub-culture and assume the formal institutionalized values of the high school who are successful not only in high school itself but in young adulthood as well.

These findings emphasize the effectiveness of motivation and performance rather than native ability. From our data it is clear that actual performance in high school in the face of pressure, in spite of the necessity for delayed gratification, is more predictive of later success and accomplishment than is capacity.

TABLE 9

Intelligence and Occupational Achievement
(Percentages)

Occupational Level Attained	IQ			
	1 Low	2 Middle-Low	3 High-Low	4 High
	N=22 %	N=74 %	N=84 %	N=38 %
High	0	5.4	9.5	21.1
Middle	45.5	56.8	61.9	63.2
Low	54.5	37.8	28.6	15.8

The lack of a relation between salary and high school achievement does not detract from the previous discussion. Amount of income was found to be unrelated to social class also, and in fact was negatively related to social mobility (r = -.21), and level of education attained (r = -.20). Salary related significantly only to these two variables and one social variable for the total sample. This finding probably reflects the wage scale of an urban area in which skilled trades may be paid at wages equal to or exceeding those of many white collar occupations. This is particularly true on the lower levels of white collar occupations likely to be attained by our group in their middle twenties. Also, the members of our follow-up group that were in relatively high occupational positions had continued formal educational training longer than those in skilled work and so were still well below the peak of their earning capacity.

4. The Relationship between Academic Performance and Psycho-Social Measures in Young Adulthood

The relationship of academic success and achievement in occupational areas raises a question about the possible effect of academic achievement upon non-academic areas of adult behavior. The low but positive association between grades and social performance in school-centered activities and cliques gives little support for the possibility. Also, the evidence that scholastic achievement is related not to social facility but to the integration of the student in the high school system (including some degree of acceptance of the values of the school) is relevant. These findings suggest that there would be very little relationship between academic achievement in high school and the extent of social activities in young adulthood.

This turns out to be the case. Neither high school performance nor the level of intellectual capacity are related to the degree of social activity in the follow-up phase. The social measures include both formal and informal social clubs, number of friends reported, and number of social activities per week.

High school academic achievement was also apparently unrelated to the young adult personality variables derived from the TAT. The correlations of rank in class, grade point average and IQ with young adult ego functioning, young adult ego complexity, change in ego functioning between high school and young adulthood were low, sometimes negative, but never statistically significant. Responses to a semantic differential technique were obtained on several concepts (self, ideal self, peers, etc.) from our young adult sample. Although not administered to the group when they were in high school, this technique was designed to give information about the group's conception of young adults as compared with adolescents and disclose self-appraisal as individuals. Each member of the interview sample was asked to use the word pair scales to describe his recollection of himself as a senior during high school. Although this retrospective view could not be used as a technique for longitudinal comparisons, it was related with high school measures in an effort to see whether high school behavior was associated with self-image in young adulthood.

For the most part no relationships appeared between differential responses and young adult behavior. The exception to this general finding was a tendency for males who had earned high grades to describe themselves as having been more docile, conforming, and generally less masculine than their peers who did not do so well in school. Similar relationships were found between self-image in young adults and grade point average. This result recalls the tendency of girls to overachieve and perform better in high school than boys and suggests the notion that high school climate was not as compatible for males as for females. Perhaps boys who accept the academic, scholastic orientation of the teachers and administration of the school are less likely to match the stereotype of adolescent masculinity.

B. Patterns of Achievement Between High School and Young Adulthood

One of the objectives of the study was to define and examine groups who showed certain sequences of achievement between adolescence and young adulthood. The relevance of academic achievement in high school for subsequent performance emphasizes the significance of this type of analysis. These achievement groupings were oriented toward academic achievement, although other criteria were utilized in defining the patterns of achievement at the follow-up period.

High and low achievement in high school was defined on the basis of grades, taking the upper and lower 30 percent for males and females separately as the cut-off points. High achievement in young adulthood was defined by any one of three criteria: level of occupation, social mobility of at least one social class step and salary. Low achievement was defined by level of occupation, downward mobility and salary. No individual qualified for the high group if he were low in any one of the three criteria, or for the low group if he were high in any of the three criteria.

Combining criteria at both high school and young adult levels resulted in the following achievement groups:

High-high Group: subjects who were relatively high academic achievers in high school and who were in relatively high occupational levels or were socially mobile eight years later

High-low Group: subjects who were high achievers in high school but low in occupational achievement

Low-high Group: subjects who were low achievers in in high school and high in occupational achievement

Low-low Group: subjects who were low in achievement at both points in time

Of the original 351 subjects, 51 males and 69 females fell into one or another of these four groups (Table 10).

The four groups were aligned in several ways for purpose of comparison on each variable to be considered. For example, those who were high in school performance were compared with those who were low, irrespective of young adult performance; those high in youhg adult performance were compared with those low in young adult performance, irrespective of high school performance; those high in young adulthood but low in high school performance were compared with those high in both, etc. All possible

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TABLE 10

Distribution of Achievement Groups by Sex
(Percentages)

Sex	High-High	High-Low	Low-High	Low-Low
. . .	N=41	N=17	N=21	N=41
Males	44	06	52	54
Females . . .	56	94	48	46

TABLE 11

Over- and Under- Achievement in High School
and Achievement Groupings

Achievement Level	High-High	High-Low	Low-High	Low-Low
	N=41	N=17	N=20	N=38
Over- Achievers *	56	82	25	34
Under- Achievers	44	18	75	66

*Slight differences in N from table to table indicate lack of information on specific variables.

comparisons were made in which differences in the variables under consideration could have been attributed to either high school or young adult performance.

Using achievement as the dependent variable, we will present data on the relationship between patterns of achieving behavior and other areas of performance at the high school and young adult periods. While this strategy focuses upon a specific type of performance and is thus limited in scope, it provides a method for a gross examination of the consistency of behavior in several sectors.

C. Relationship of Achievement Grouping to Adolescent Behavior

1. Scholastic Ability and Performance.

As indicated above, the absolute level of high school grades was the strongest predictor of later success, particularly for males. This pattern raised a question about the extent to which such achievement, at both high school and adult levels, is a function of mental ability, as measured by tests, and how much it is a consequence of industry. In our data the relationship between intelligence and grades was significant at typical levels ($r = .56$) and so differences of ability among the four achievement groupings were apparent. However, intelligence did not vary among the post-high school achievement groups to the same degree. In part, this change was accounted for by the relative achievement of females (as measured by husband's occupation in the follow-up stage) which tended to decline more than did that of males.

A similar pattern was found for the tendency to over- or under-achieve (disparity scores) as measured by the discrepancy between grades and IQ. High school performance in all groupings was related to disparity scores, but these scores were not predictive of occupational success (Table 11).

As was expected, the amount of post-high school education differed greatly among the groups, as the data in Table 12 show. Those who did well scholastically in high school more often went on to college and went farther in higher education than did low school achievers.

2. Social Class Background, Social Skills and Activities.

The typical relationship between social class background and school achievement did not appear in our data, possibly because of the relatively homogeneous nature of the group and because of the self-selective motivational factors which kept those young people in high school while many of their peers from unskilled and semi-skilled homes had already dropped out. At any rate, neither the ISC nor occupational level of the students' fathers differentiated among any of the four groups in any combination.

Social participation seems to have slight association with both high school performance and success in young adulthood. The high-high group was consistently high on all social variables (with one exception) and the low-lows were low. Table 13 presents the patterns of social activity by achievement groupings. Although the difference between groups on any given measure was relatively small, it is significant that all the differences were in the same direction, i.e., the high-highs were more socially active

TABLE 12

Educational Attainment by Achievement Groups (Percentages)

Educational Level	High-high	High-low	Low-high	Low-low
	N=41	N=18	N=21	N=39
High School Only	15	61	52	67
Some College	22	22	29	19
College Graduate	63	11	19	08

TABLE 13

High School Social Activity by Achievement Groups (Percentages classified as high)

Variable	High-high	High-low + Low-high	Low-low
Teacher's rating (apparent sociability	86	57	37
Mutual choice friends	59	33	33
Formal school associations	66	47	40
Formal outside school associations	56	45	33
Popularity	46	39	44
Informal school associations	59	70	50
Informal outside school associations	29	30	33

*Using the sign test to examine the significance of the patterns of response, the following two-tailed probabilities were found: the difference between high-high and low-low is less than .05; between high-high vs. high-low and low-high, not significant; and between high-low and low-high vs. low-low, not significant. Applying the Wilcoxin Matched-Pairs Ranked Sign Test to the high-low + low-high vs. low-low difference gives a two-tailed probability of less than .02.

than the low-lows, with the high-lows being intermediate in most cases.[1]

While the differences in social behavior between the extreme achievement groups may be considered significant, that is, not merely random fluctuation, the relationship between high school social skills and young adult performance was not great. A study of the 20 socially most popular and prominent members of the senior class showed that this group did not maintain a relative advantage or success in social areas, nor did they aggain a relative advantage in any other area of young adult performance when compared with a matched group of socially non-prominent peers.

3. Personality and Family Data.

Although the subjects' level of occupational aspiration (as reported in the high school phase of the study) was associated with academic success, such aspiration held little relation to actual occupational success later (Appendix 4, Table 4). Similarly, those whose parents held high occupational aspirations for them did well in high school but did not necessarily show occupational achievement as adults. Neither fathers' nor mothers' attitudes toward college attendance of our subjects or actual level of parental education bore any relationship to the subject's success either in high school or after.

The four groups were compared on TAT measures, ego functioning, and ego complexity. These measures are only slightly associated with academic behavior in high school or achievement in young adulthood. There was a significant association between "ego functioning" in high school, as measured by this technique, and high school achievement, but young adult ego functioning was not related to young adult occupational achievement. Indeed, there was very little relationship for individual subjects between these psychological indicators at adolescence and scores eight years later. The most significant pattern in these indices was the tendency for the scores of males to be higher at young adulthood than at adolescence and the scores of females to be somewhat lower.

4. Relationship of Achievement Groupings to Young Adult Performance.

Since the selection of the groups was based upon occupational level at the follow-up stage and upon social mobility as indicated by the attainment of an occupational level higher than that of the father, the analysis of performance at the follow-up stage is restricted to social variables and measures of personality.

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[1] The consistency that appeared from one measure to another was not a result of a high relationship among them. The actual correlations among these variables for the total group were low. Data on this point are presented in Chapter V.

5. Achievement Groupings and Integration into the Social Life of the Community.

In the area of sociability and social activities, no association was found between the achievement groupings and popularity, as measured by the number of friends the subject claimed to have. However, those who performed relatively well as young adults more frequently held membership in formal associations. Reports of informal associations showed no such relation.

Another measure of informal sociability was obtained by inquiring about the number of social activities engaged in per week. This variable was used to measure current activities, whereas the previously mentioned indices attempted to guage membership in organizations without evaluating frequency of activity in these organizations. However, frequency of social activities showed no significant associations with achievement. Also, total number of intrafamilial social activities per week and a composite of family and non-family interaction showed no significant differences among the achievement groups.

A summary of the level of social activities of the several achievement groupings is shown in Table 14. Again, the differences between the groups do not generally attain statistical significance, but the pattern of difference is relatively consistent over the several measures.

6. Achievement Groupings and Personality Measures.

The measures that we obtained on the nature of internal states of satisfaction, self-concept, and ego functioning as estimated from the TAT response did not show high association with achievement at the adult level. Ego functioning and ego complexity in young adulthood, as discussed earlier, were derived from a second administration of the TAT. Neither of these differentiated among achievement groups.

Another measure dealt with an assessment of psychosocial growth. The interviewers rated each subject on "role acceptance," a rating designed to reflect the extent to which the subject had made the transition from adolescence to adulthood. The basis for this rating was an assessment of the individual's willingness to assume the responsibilities of adulthood. When compared on this measure of psychosocial transition, those subjects who performed well in school were rated relatively higher as young adults than those who did not do well in high school. In addition, subjects who achieved, by our criteria, in young adulthood were also rated

TABLE 14

Young Adult Social Activities by Achievement Groups
(Percentages classified as high)

Variable	High-high	High-low + Low-high	Low-low
Formal Associations	77	48	32
Social Index II*	59	30	45
Social Index III+	81	59	55
Number of Friends	59	39	41
Non-family social activities	59	61	22
Expressed satisfaction with people	50	36	23

*Summary of organizational membership and number of friends.

+This variable represents the total number of social activities participated in per week.

TABLE 15

Role Acceptance Ratings and Achievement Groupings
(Percentages)

Ratings	High-high	High-low	Low-high	Low-low
	N=26*	N=14	N=13	N=23
High	88	93	77	48
Low	12	07	23	52

*Not all of the achievement groups were interviewed; these ratings were made only on the basis of interview contact.

higher on this measure. That there was some effect of post-high school experience on psychosocial growth is indicated by the fact that of our two groups who did poorly in high school, those who performed well in young adulthood were rated higher on this area of psychosocial achievement (Table 15).

D. College as an Intervening Variable

It seems apparent that high school performance and experiences are related to young adult performance particularly in the area of academic achievement. However, the nature of this influence is not obvious. Many experiences intervene between high school and young adulthood and the influence may be indirect rather than direct. For example, it is quite possible that the high school performance has some effect upon post-high school experiences which in turn effect young adult performance. One such possible intervening set of experiences are those gained as a result of attendance at college.

Level of education attained was related to high school achievement and capacity as measured in high school (Table 16), but unrelated to social class background and disparity scores. In general, the correlations which were statistically significant were higher for the males than for the females.

TABLE 16

Level of Education Attained and High School Academic Achievement and Capacity*
(Pearson product-moment correlation coefficients)

Level of Education Attained with:	Males	Females
Four semester grade point average	.60 (p = .01)	.38 (p = .01)
Rank in class	.42 (.01)	.28 (.01)
I.Q.	.44 (.01)	.27 (.01)

*The correlations between education and disparity, and education and parental ISC were not significant.

Examination of the frequency distributions showed the strength of the relationships but also showed that individuals with a very wide range of capacities and high school performance did go to college or even beyond.

For the total sample, individuals were differentiated by I.Q. according to level of education attained. However, individuals from almost all I.Q. levels represented in this sample of high school graduates went beyond high school to college. It was only when graduate school attendance was examined, that the lower I.Q. levels disappear. Not one individual who was lower than the graduating class average in I.Q. attended graduate school.

There was only a low relationship between father's occupational level and offspring's level of educational attainment within our group and little relationship between scholastic over- or under-achievement and post-high school educational level.

Some sex differences were visible. The relationship between I.Q. and level of education holds for both males and females, although it is slightly stronger for males. Further, although rank in class was directly related to level of education for both males and females, the relationship was much stronger for males. Whereas for the females there was almost a continuous trend such that the higher educational levels had proportionately more of those higher in the high school graduating class (with girls as low as the sixth decile in high school going on as far as the completion of some graduate work), among the males there was only one individual in our sample from the first four deciles of his high school class (thirty-six males from the upper four deciles of the graduating class were included in our follow-up sample) who did not begin a college education. Thus for females, the higher the class standing, the more likely they were to go on to college; for the males, virtually all those in the top 40 percent of their class went to college, while some from the lower deciles went also.

Disparity (over- or under- achievement), which was found to be unrelated to college attendance for the total sample, was also unrelated to college attendance for males and females separately. In general, the girls tended to overachieve in high school while boys tended to underachieve. There were slight trends such that for males educational level tended to be associated with high school overachievement, while for the females educational level tended to be related to high school underachievement.

Other high school measures were examined relative to amount of education. High school measures--number of mutual choice friends, membership in jacket clubs and membership in formal school organizations--were found to be unrelated to college attendance for the total sample. A sex difference was found, however.

Whereas there was no relationship for the females, there was a consistent and direct relationship between social participation and college attendance for males (Table 17).

TABLE 17

Level of Education Attained and High School Social Activities
(Pearson product-moment correlation coefficients)

Level of Education Attained with:	Males	Females
Mutual choice friends . .	.35 (p = .01)	.02 (NS)
Informal school organizations	.19 (p = .10)	-.15 (NS)
Formal school organizations	.28 (p = .05)	.01 (NS)

While the correlations are significant for the males, they are not high. Nonetheless, they are sufficiently high to raise a question as to whether social participation and social facility in high school lead to experience and/or skills which result in continuing education beyond the high school level, for males.

Level of education attained was also found to be highly related to occupational success in young adulthood. This was measured directly for the males; for females, the occupational level of the husband was used. The correlation between these two variables was .61 (p = .01) for the males, and .45 (p = .01) for the females. Correlations between young adult social status and social mobility, and level of education were not run since education was one of the criteria for the determination of young adult social status.

In the previous section on achievement groups it was pointed out that level of education was highly predictive of later success for the total sample but more so for the males than the females. In that section it was shown that level of education was related to high school performance, and young adult performance irrespective of high school academic achievement (48). This suggests that college attendance acted as an intervening variable between high school academic success and post-academic (occupational) success. It is possible that a curvilinear relationship exists between high school academic performance and post-academic success.

If so, the upper end of the high school grade curve performance may predict later success, while at the middle and lower levels of the distribution; grades may not differentiate later success (at least in our group which comes from a school not strongly oriented to college). The predictiveness of later success, if high school performance were high, may be due to college attendance. College would act as a springboard for future occupational success.

To determine the effect of level of education attained on the relationship between high school and young adult performance, frequency distributions were obtained which cross-tabulated level of education, rank in class and young adult occupational level (Tables 18, 19, 20, 21). Such a cross-tabulation makes it possible to examine the occupational success of individuals of similar high school academic achievement but different levels of college attendance. In addition, the obverse comparison was also possible--i.e., level of education was held constant and high school grades were compared with young adult occupational success.

TABLE 18

Level of Education and Occupational Success
(With Rank in Class held constant)

Males						
Occupational Level	Educational Level					
Rank in Class: High						
	High School Only N	%	Some College N	%	College Graduate N	%
High*	1	100.0	5	41.7	23	95.8
Low	0	00.0	7	58.3	1	04.2
Total . . .	1	100.0	12	100.0	24	100.0
Rank in Class: Middle and Low						
High	2	7.4	12	48.0	13	86.7
Low	25	92.6	13	52.0	2	13.3
Total . . .	27	100.0	25	100.0	15	100.0

*High-major responsibility in large or small firms.

TABLE 19

Level of Education and Occupational Success (With Rank in Class held constant)

Occupational Level	Females Educational Level					
	High School Only		Some College		College Graduate	
	N	%	N	%	N	%
Rank in Class: High						
High	11	36.7	10	66.7	17	100.0
Low	19	63.3	5	33.3	0	0.0
Total . . .	30	100.0	15	100.0	17	100.0
Rank in Class: Middle and Low						
High	12	23.1	4	26.7	2	66.7
Low	40	76.9	11	73.3	1	33.3
Total . . .	52	100.0	15	100.0	3	100.0

TABLE 20

Rank in Class and Occupational Level (With Level of Education Held Constant)

Occupational Level	Rank in Class					
	High		Medium		Low	
	N	%	N	%	N	%
Males						
High School Only						
High	1	100.0	1	10.0	1	5.9
Low	0	00.0	9	90.0	16	94.1
Total . . .	1	100.0	10	100.0	17	100.0
Some College						
High	5	45.5	6	60.0	6	40.0
Low	6	54.5	4	40.0	9	60.0
Total . . .	11	100.0	10	100.0	15	100.0
College Graduate						
High	22	95.7	8	100.0	5	71.4
Low	1	4.3	0	00.0	2	28.6
Total . . .	23	100.0	8	100.0	7	100.0

TABLE 21

Rank in Class and Occupational Level
(With Level of Education Held Constant)

Occupational Level	Females					
	Rank in Class					
	High School Only					
	High		Medium		Low	
	N	%	N	%	N	%
High	11	36.7	7	23.3	4	19.0
Low	19	63.3	23	76.7	17	81.0
Total . . .	30	100.0	30	100.0	21	100.0
	Some College					
High	10	66.7	4	33.3	0	0.0
Low	5	33.3	8	66.7	4	100.0
Total . . .	15	100.0	12	100.0	4	100.0
	College Graduate					
High	17	100.0	1	100.0	0	00.0
Low	00	00.0	0	00.0	0	00.0
Total . . .	18	100.0	1	100.0	0	00.0

In summary, our data on the effect of college indicate that both high school academic achievement and level of education attained are highly predictive of young adult occupational success. College attendance strongly and directly influences the occupational level of our subjects. The effect of high school achievement on young adult occupational level seems to be primarily that of guiding the student toward or away from college; however, it is college attendance and the level of education then attained which influences later success.

CHAPTER IV

THE TRANSITION TO ADULT ROLES

A. Acceptance of Adult Roles

In our society there is no obvious point, either chronologically or behaviorally, at which the adolescent is recognized as an adult. Although marked differences exist between the two stages as psycho-social and age-typed phases of development, there are few clear and necessary conditions or patterns of behavior that signify adulthood. However, because of its relevance for this research, one of our goals was to evaluate the extent to which this transition to adulthood had been completed and identify factors which retarded or promoted it. In attempting to establish criteria for assessing the shift to adulthood, the research staff usually could reach consensus in discussing a particular case. However, the evidence for psycho-social growth was often based on circumstances of the individual case, and it was difficult to specify criteria which could be applied to all subjects in the study.

Our solution was to define adult status in terms of four achievements expected of adults in our society: (1) commitment to a job or career; (2) separate residence from parents; (3) marriage; and, (4) parenthood or some other evidence of generativity.[1] However the only one of these regarded as essential was commitment to a career; the others were seen as somewhat less critical. Our procedure for evaluating the adult role acceptance of the subjects was to use these criteria to obtain a global rating. Following staff conferences and definitions of criteria, each interviewer was asked to rate each subject he interviewed, on a one to four point scale, as to whether the subject had assumed the roles and responsibilities of adulthood.[2] The distribution of ratings is shown in Table 22.

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[1] Erikson, E. "The Problem of Ego Identity," Psychological Issues (New York: International University Press, Inc., 1959).

[2] Inter-rater agreement on the global rating was as follows: 80 percent, no difference; 20 percent, one scale apart.

TABLE 22

Ratings of Acceptance of Adult Roles (Percentages)

Ratings 4=high 1=low	Males N=73	Females N=93	Total (Males and Females) N=166
4	35.6	41.9	39.2
3	38.4	33.3	35.5
1 & 2	26.0	24.7	25.3
Total . . .	100.0	99.9	100.0

Our analysis dealt with these ratings, which we term "role acceptance," with these objectives in the design: to examine the relationship of high school experience to successful transition to adult roles; to examine the young adult correlates of role acceptance; and to supplement theory and knowledge about both successful and unsuccessful role transition processes. In this section we report the findings and conclusions which come from the analysis of data relating to transition to adult roles.

1. High School Antecedents of Role Acceptance.

The transition of an adolescent into the network of attitudes, behavior and roles required of adults in a complex society such as ours is, not an automatic shift which occurs with the passing of time, but a process that engages the individual's ego functions and resources. As such, it is an achievement for which the adolescent may be more or less prepared; that is, it is a shift in emotional and cognitive orientation that may be facilitated or hampered by previous experience. This view of the transition process is obviously consistent with much of the current theory on psycho-social development and personality growth.

In this context of prevailing theory, the question raised by this chapter is this: to what extent does success or failure in areas of experience in high school predict success in making this transition?

In response to this question, the interviewers' ratings were compared to measures of high school behavior. The analysis of our data for relationships between high school experience and role ratings showed no association in either academic, social or psychological areas. A tabulation of ratings with scholastic rank in class is presented in Table 23. While there is some tendency for high achieving girls to get high ratings, this pattern does not hold for middle and low achievers.

TABLE 23

Academic Achievement and Role Acceptance
(Percentages)

Ratings	Rank in Class High	Middle	Low
	Males		
	N=17	N=28	N=25
High	23.5	46.4	32.0
Middle	41.2	32.1	44.0
Low	35.3	21.4	24.0
Total	100.0	99.9	100.0
	Females		
	N=47	N=38	N=7
High	53.2	28.9	42.9
Middle	34.0	34.2	14.3
Low	12.8	36.8	42.9
Total	100.0	99.9	100.1

The low association that appears in this table shows a sex difference. This is supported by correlation computations; grades are positively related for females (.29), but negatively related for males (-.23). This is one of the few areas of our data in which grades do not seem to contribute to adult achievement. Another evidence of this pattern appears in the differences between single and married men in both high school grades and interviewers' ratings. Single men made higher grades in school (2.66 of a possible 4.0 as compared with 2.13 for married males) and received lower ratings (2.41 of a possible 4.0 as compared with 3.33 for married men).

This sex difference in the influence of high school experience upon role acceptance ratings appears in areas other than academic achievement. IQ is negatively correlated with ratings for males (-.28), but positively related for females (.18). Membership in formal school associations also shows a more positive relationship for women than for men, but the magnitude of the correlations is low.

It might be argued that social and psychological experience should play a greater part in preparing the teen-ager for adult roles than does academic achievement. Despite the theoretical support for this position, the evidence we have suggests that the extent and range of social activity in high school have no significant association with success in making a transition to adult roles. Additional data showing correlations of ratings with social and psychological variables are presented in Appendix 3 .

2. Correlates of Role Acceptance.

By definition, role acceptance ratings included a constellation of indices and are necessarily related to young adult behavior. However, the relationship with individual variables is not high, and there are a number of variables to which the ratings do not relate at all.

The interview ratings do reflect differences between single and married males, as anticipated. However, a number of single men received high ratings so that a distinction between married and single men was not necessarily reflected in the ratings.

The pattern of association between ratings and young adult variables is summarized in Table 24. It is evident from this table that role ratings are related primarily to psychological variables--TAT indices of ego functioning and semantic differential items indicating stability and self-evaluation. On the possibility that these several scores might combine to give a useful index of successful transition four measures (ratings, stability factor from the semantic differential, ego functioning in 1960 and self-evaluation ratings) were combined, weighted equally, to provide a measure of optimal transition or adjustment.

This composite measure was examined in relationship to both high school and adult variables. The associations were generally low, as the Tables in Appendix 8 show. These results suggest that high school experience has been over-emphasized as a time of preparation for adult roles.

However, the ability to make a successful transition to adult roles does appear to have theoretically relevant antecedents when we examine a group of our subjects who are relatively late in making a transition to adult behavior--the single males. We turn now to a discussion of this group of our sample.

TABLE 24

Young Adult Correlates of Role Acceptance (Pearson Product Moment Correlations)

Variables	Males (N=56)	Females (N=61)
Role Acceptance Ratings With:		
Stability Factor (Semantic Differential)	.25	.06
Change in Ego Functioning	.29	.17
Ego Functioning (1960)	.22	.20
Social Mobility	.17	-.23
College Attendance	-.12	.19
Salary	.21	.16
Social Index I	.11	.17
Number of Friends	.23	.30
Social Index III	-.13	.14
Expressed Satis., work	.11	.11
Expressed Satis., people	.10	.19

B. Single Men

From both the societal and the individual viewpoint, marriage is functionally important. It is regarded as one of the critical tasks of early adulthood with important consequences for future development and psychological health. To the layman, as well, it is a kind of yardstick for assessing fulfillment of social obligations in one area of social and sexual functioning.

In our society the age at which marriage occurs varies with sex, social class, education and--somewhat less predictably--with the times. However, the median age of marriage for males in the United States in 1956 was 22.9 years; in 1958, 22.5 years. In the follow-up sample 23 (34 percent) of the 67 males were still single at the age of 25.5 to 26.0 years. By contrast, 44 of the men were married, and 31 of these were fathers.

This difference in an important area of social and sexual behavior raises several questions which will be explored in this section: Is there continuity between adolescent and adult social-sexual behavior? Are differences in this area of behavior associated with other differences which have implications for adolescence and the high school experience, the transition into adulthood and for adult experiences?

Eight years after graduation from high school, the single men in this study represent a variety of occupations: brick layer, small business proprietor, engineer. All of them have had some college education and a few were still working toward degrees--in three cases toward advanced or professional degrees. The social class backgrounds of four of these subjects were middle-middle; of eleven, lower-middle; of eight, upper-lower. In the follow-up study, however, 11 are middle-middle; eight, lower-middle; and four, upper-lower class. In spite of the fact that many (48 percent) have been upwardly socially mobile, almost none of them have been geographically mobile (all but two still residing with their parents).

Although most of the single men in this study are aware of deviating from the norm with respect to their unmarried state, few of them see marriage as imminent. However, two of these young men are engaged, five more have been engaged at one time or another, and most of them date--if not frequently, at least regularly. Since 12 state that they would like to date more often, it seems likely that many of the single men are not entirely satisfied with their heterosexual life.

Although the dating behavior of single males has no counterpart in the life of the married males, the differences between the dating behavior of the two sub-groups at adolescence is striking. It clearly suggests, if not a continuity for one kind of behavior, at least some relationship between adolescent dating patterns and adult social-sexual behavior. Specifically, males who were married as young adults dated more frequently and started dating earlier in high school than did those who were still single as young adults. Also compelling are the differences in the nature of the dating experience for many of these adolescents. Only one yough who "went steady" in high school was single at the age of 25, whereas 61 percent of those males who were married as young adults "went steady" while in high school. In addition, 30 percent of the men who were later married "went steady" more than once in high school.

Were these single "youths" less aggressive in high school? Less interested in dating? Lacking in social skills that might have made them acceptable to girls who were dating? Unfortunately, we cannot test these alternative hypotheses directly; however, the fact that single and later-married men received approximately the same average number of popularity votes suggests that the single males were not lacking in social skills.

Dating is only one form of social activity--the high school antecedent which seems most relevant to later marital status. However, other forms of sociability also seem relevant--if only to suggest whether differences in dating behavior are indicative of differences in a more general type of "sociability."

TABLE 25

High School Dating Patterns of Single and Married Males
(Percentages)

	Single Males %	Married Males %
	N=23	N=51
A. First Dating Experience		
Grades 1-9	17.3	33.3
Grades 10 & 11	56.5	45.1
As a senior	17.4	19.6
In first year after graduation	4.3	2.0
After first year after graduation	4.3	0
Total	99.8	100.0
B. Frequency of dating		
Low	30.4	5.9
Middle	52.2	29.4
High	17.3	64.7
Total	99.9	100.0
C. How dating compared with classmates		
Dated more often	0	14.0
Dated less often	68.2	38.0
About the same as most	31.8	48.0
Total	100.0	100.0

A survey of the relevant data indicates that, in general, the social relations and activities of single men and males who married before their mid-twenties, aside from dating behavior, did not differ significantly in high school. Comparisons at adulthood are less feasible because the life situations of these two sub-groups differ with respect to several relevant dimensions.

A slightly larger proportion of men who married participated in organized sports in high school (53 percent) than did those who were single (48 percent); however, they did not win a higher percentage of athletic letters. Both groups belonged to about the same number of school organizations; but single men held a somewhat larger percentage of offices, and attained a slightly higher high school social index (which combined several measures of participation). These data indicate that single males were not only as active socially (if not more active) but more often excelled or assumed leadership roles.

When asked "what are the most important things which have happened to you since high school" and "What are the most important things that you do during the average week," single males most often responded in terms of work and/or education. Social interaction, associational membership, and heterosexual relating were much less often mentioned. The value placed on occupational and educational achievements is not surprising for young men in this age group. For the single men, however, this emphasis may be more pronounced because they have not invested energy into the roles of marriage and parenthood. On the other hand, the investment in educational and occupational hopes and plans of this particular group of men may account, in part, for their failure to marry before the relatively early age of 25 to 26 years.

There can be little question that several of these men have been highly successful, as evidenced by the fact that 45 percent have been upwardly mobile, and that they have attained a higher occupational status, on the average, than have the married males.

Also indicative of their high level of accomplishment is the fact that all of them attended college, as contrasted to 64 percent of the married men. For two-thirds of the single men the expressed reason for attending college was to prepare for a career. However, at adolescence, the career in question was still undecided for 30 percent of these young men. For others, career plans changed, since only four of these men stated that they had decided on their current occupation by the end of high school and another nine (43 percent) indicated that they did not choose or get into their current work until four to eight years after high school graduation. Thus, for most of these young men, college was a starting point in the search for an occupational identity.

Although about half (11) of the single men obtained college degrees (three more were still working for degrees), nine left college before graduation. Lack of interest, failure, and suspension were some of the stated reasons for termination of education. Since half of those who left college have I.Q.'s above the sample average, it seems unlikely that inability to do the work was the primary reason for leaving.

Indeed, we may speculate that college attendance may not be an expression of drive for some individuals, but rather an expression of an anergic state. Such an individual would attend college as a path of least resistance, as a stop-gap manner of prolonging adolescence, of delaying the necessity for occupational choice and commitment, of remaining free of responsibility. Needless to say, most of such individuals probably would not remain in college for any prolonged period of time. For others, such a prolongation of adolescence might provide opportunity for dealing with an ego identity crisis.

As young adults, 60 percent of the single men appear to have made concrete occupational advances; the others are less certain. However, all but one mentioned additional occupational hopes or plans when asked about the future.

In striking contrast to the desire for change and advancement or mobility in the occupational area is the lack of geographic mobility characteristic of this group. Not only have they remained in their home town (which probably has attraction because of its size), but they have also continued to live in the parental home (Table 26).

TABLE 26

Geographical Mobility of Single and Married Males
(Percentages)

Residence	Single Males N=23	Married Males N=51
Same Address	87.0	7.8
Same Neighborhood	0.0	15.7
Moved within Chicago	0.0	19.6
Moved to Suburbs	8.7	45.1
Moved out of Metropolitan Area . .	4.3	11.7

All but two of the single men in this study returned to the parental home after attending college and/or serving in the Armed Forces. Some of them contribute to their parents' income and most of them pay room and board. Nonetheless, living at home is relatively inexpensive, and this is the major reason given by most of them (17) for not finding separate lodgings. This reason lacks conviction, however; most of these men had full-time jobs, and their average and median incomes are only slightly less than the incomes of the married men who support not only themselves, but their families as well.

The statements of some of these men suggest that certain comforts and conveniences, not easily obtained elsewhere, are provided at home. Such advantages as meals at home and having laundry done at home are mentioned by nine. In eight cases closeness to one's family, often with a slightly facetious or condescending note, was stressed. Some other advantages were "companionship," "help with decisions and problems" and "more security."

For the most part these men reported satisfaction with their current living arrangements. However, there were only three men who stated that there were no disadvantages. The complaints most frequently mentioned were less freedom, lack of privacy, and household chores. However, they seemed content to have sacrificed freedom and independence for greater physical and emotional comfort and security.

These young men reported little friction between themselves and their family. All of them eat regularly at home and all but five spent some leisure time there. In addition, all but five reported that they discuss their problems with parents; all of them feel they could ask their parents for a loan; and 15 (65 percent) have actually borrowed money.

Apparently most of these single men also had good relationships with their parents while in high school. On interview questions dealing with parental understanding and harshness of discipline 80 percent of the single males claimed positive and close relationships with their parents (particularly with mothers), as compared to about 50 percent of the married males. The fact that the single men, with only two exceptions, are still living at home and that these responses were made in retrospect, may have influenced their comments in a favorable direction. However, the generally positive and undemanding (perhaps indulgent) parental attitudes may also account, in part, for these results.

Although most of the questions directly concerned with parental behavior and attitudes elicited positive evaluations by the single males, some hint of dissatisfaction with their living arrangements can also be found in the data. At least seven report some disagreement over activities at home, and only seven (30 percent)--as contrasted to 70 percent of the married males--are "very satisfied" with their family life. Twenty-two percent, as contrasted to only 6 percent of the married men, are "dissatisfied" or feel that family life "could be better." To what extent the great dissatisfaction of the single men may be associated with their relationship to their parents or to discontent--perhaps only vague, in not yet having established their own homes cannot be determined from this data. As noted before, however, more single than married men expressed dissatisfaction when asked about their current life situation generally--a difference which also emerges in assessments that are directed at more covert levels of attitudes and feelings.

In order to minimize some of the psychological defenses that people consciously or unconsciously utilize when asked questions about themselves and to tap deeper levels of feelings and attitudes, the subjects were administered semantic differential tests and several TAT pictures. The semantic differential data indicate that married men are somewhat closer to their ideal self than are single males, i.e., they see less discrepancy between what they are and what they would ideally like to be (Table 27).

TABLE 27

Self-Evaluation of Married and Single Men
(Mean Differences Between Semantic Differential Ratings on "Self" and "Myself as I would like to be.")

Scale	Single Males (N=23)	Married Males (N=51)
Gentle-rough	-.65	.41
Loose-tight	.43	-.13
Active-passive	.78	.62
Strong-weak	1.09	.77
Nice-awful	.57	.52
Steady-changeable	1.0	.25
Giving-holding	.18	.37
Mellow-raw	.30	.32
Flexible-stiff	.57	.42
Fast-slow	1.22	.75
Deep-shallow	.08	.23
Pleasant-unpleasant	.78	.94
Sure-shifting	1.73	1.25
Open-closed	.91	.73
Warm-cold	.39	.56
Firm-fluid	.77	.37
Quick-still	.87	.25
Full-empty	.91	.67

TABLE 27--Continued

Scale	Single Males (N=23)	Married Males (N=51)
Sweet-sour	.43	.75
Settled-unsettled	1.47	1.13
Responsive-reserved	.57	.02
Soft-hard	-1.30	-.48
Tame-wild	-.21	-.19
Good-bad	.34	.32
High-low	.48	.34

This measure, often used as an index of self-esteem, self-acceptance and self-approval, suggests that the married men are more content with themselves than the single men. However, the semantic differential data also indicate that for both groups of males, peers are seen as being more distant from their ideal than they themselves are. This suggests that although the single men are less approving of themselves than are the married men, they, nevertheless, still evaluate themselves as superior to others who are the same age. From this vantage point, their self-evaluation must be regarded as relatively positive.

Some of the major differences in responses to the TAT, a picture-story test used to elicit unconscious feelings and attitudes, suggest that married men are less likely to be preoccupied with feelings of inadequacy at both adolescence and adulthood than single males.

In order to assess general "personality" trends from adolescence to adulthood, the responses to six TAT pictures were categorized according to themes or plot sequence. These themes, presumably, tap psychological preoccupations and personality dimensions (see Appendix 9, Table 12). Inspection of the frequencies of the themes for five of the six TAT pictures used in the study indicate that these themes are not statistically significantly associated with marital status for males at either adolescence or young adulthood. However, one theme for card 6BM, a picture of an elderly woman with a young man, was found to occur significantly more often among the responses of single than married males at both adolescence and young adulthood. In this instance single males, more often than married males, gave responses in which the young man in the picture is seen as having a problem which stems, typically, from his own inadequacy or irresponsibility. From a societal point of view, he is more or less a failure. Sixty percent of the single males gave this response at both adolescence and adulthood; whereas 30 percent of the later-married males gave this response in 1952, and only 16 percent at adulthood. In contrast to the modal responses of the single males, the young man in the picture is not typically seen by married males as irresponsible or inadequate; the problematic situation does not stem from deficiencies in his character. Rather, the older woman is described as one who, through no fault of the young man, needs sympathy and understanding--a role typically assumed by the male without great emotional involvement.

The one great difference in the responses of males who marry before their mid-twenties and those who do not might be characterized as a passive-dependent attitude on the part of the single male toward maternal figure. Since this difference occurs at both adolescence and adulthood, it is probably not a statistical artifact--in spite of the fact that it is the only such significant difference. By adulthood, this difference increased.

We might speculate at this point that these attitudinal differences toward the maternal figure--differences, presumable affecting attitudes toward females in general--are factors relevant to marital status. Since the responses of the married men were significantly less stable (or consistent) over time, there is also supporting evidence for the view that emotional or attitudinal changes are, at least in part, a function of role changes in marriage during the transition to adulthood.

In sum, the single males differ in several ways from the married men. The most striking characteristic of these single men is that they continue to live at home or return home after college or military service. This behavior may stem from a passive-dependent attitude and underlying feeling of insecurity that is more predominant in this group of young men than in those who married early. In addition, they appear, even in high school, to have a different orientation toward females compared to the married men group. In high school, they did not "go steady," started to date later, and dated less frequently when compared to men who married before their mid-twenties. On the other hand, they participated actively in school organizations and, in general, exhibited a pattern of sociability which did not differ significantly from that of the married men.

All single males in this study attended college, with varying degrees of success. More than half of them obtained degrees and a few continued in graduate school. However, several of the single men do not yet appear to know where they are going; they have not yet established stable occupational identities. They seem not to lack the desire and ability to achieve as much as the focus and conviction necessary for channeling abilities, establishing competence in a specific area, and, consequently, consolidating strong ego identities. This, too, may stem in part from feelings of inadequacy noted above.

Because their level of aspiration tends to be high and many seem to have a strong orientation toward social mobility, one might expect them to be somewhat less satisfied with what they have attained than might be true for those who have hoped for less. The fact that these young men are not married may also intensify feelings of inadequacy and failure, since marriage may be one visible yardstick, as suggested earlier, by which they clearly have not measured up to their peers. It may be the discrepancy between what they seek and what they have attained that is partly reflected in the actual- and ideal-self discrepancy noted in the semantic differential responses.

Although the failure of these young men to marry could be partly the consequence of their occupational and mobility strivings, other factors seem equally relevant. Since many of the married men have had similar aspirations, it seems necessary to question why some should have been deterred from marriage and others not. On one level, the answer may be that these young men approach the world, in general, still uncertain of themselves, still hindered by passive-dependent attitudes, but also hopeful of high achievement. They have not been quick to establish separate lodgings or to tackle an occupational goal without benefit of some college education. And for some, even college education has seemed to be the path of least resistance. Their attitudes towards girls, dating, and marriage represent another facet of this cautious and uncertain approach. If, on the one hand, this seems to suggest a certain amount of wisdom, it also suggests a certain hesitancy to get involved, to commit oneself, to take the risks that may be necessary for later fulfillment.

C. The Shift to Marital Roles.

1. Married Men.

The group discussed in the preceding section is one that in certain respects has delayed the transition to full adulthood in the society. However, the majority of both men and women of our follow-up sample have married and started families. This part describes these groups and their views of the major family roles.

The attitudes of the married men toward their roles as husbands and fathers reflect several changes between the adolescent and young adult years. Our data about these attitudes were obtained in interviews asking about opinions of which qualities were important in women in high school and young adulthood. Their responses to our questions were often colorful and reminiscent of high school dates. A change in their evaluation of women is clearly evident and reflects a difference in their needs and expectations in interaction with females.

In high school, the male seeks emotional support less from girl friends, or opposite sex peers in general, than male peers.

If the male peers approve of his female partner of the moment, the adolescent gains acceptance, prestige, and emotional support. There is apparently little consideration of shared interests in choosing a girl friend. Rather, the bases are appearance and social adeptness of the girl.

During the college years, or between 18 and 22, peer approval becomes less important than in high school, and the young man begins to seek emotional support through more personal contact with the young woman. A pleasant disposition is described as a primary criterion of choice instead of "a nice personality." The intimacy theme is even more pronounced in our subjects' description of criteria of evaluation of the female in young adulthood. The ability to accept as well as return love, assume responsibility for the maintenance of a home and family, moral strength, intellectual compatibility, and sexual desirability--in that order --were forwarded as those things most desirable in a (potential) spouse.

In effect, as high school students, the boy and girl each enact their role, more than they really interact. The participants are easily replaceable. Rewards are initiated from the outside of the dyad. Individual differences are important in terms of varying social desirability as determined by the peer group.

After high school, the trend is such that the rewards of male-female interaction come increasingly from within the relationship. The mode of relating more and more closely approximates that of a primary group.

When asked what marriage means to them, the majority of our sample of single males responded in terms of the intimate nature of the husband-wife relationship. The aspects most often mentioned were exemplified in love, understanding, companionship, sharing and solving problems and planning for the future. Slightly less often, marriage was envisioned in terms of the responsibilities of attaining independence from their own parents, of setting up a new family, and of fulfilling parental roles.

In contrast, less than half of the married males described marriage in light of acceptance of responsibility and the gratificiation from successful completion of tasks. Such satisfaction, they said, had been only vaguely anticipated before marriage. More grandly, they spoke of marriage as being the "fulfillment of life." Much less often did married males list positive interaction with wife, and establishing a home and family as the meaning of marriage.

These differences, especially the comparison of the modal responses, shows the relative immaturity of the single males, even though the two groups are the same chronological age. The single males conceive marriage primarily as an expedient toward independence and thence psychological intimacy with a female. There is the implication here that the single males have not as yet been able to attain the personal independence necessary to affiliate with a female on a mature basis. With marriage, the married males have achieved and now take for granted such intimacy; indeed, further psychic growth apparently is taking place.

In relation to their children, the married males saw three roles as being crucial for the "good father." The first was that of socio-emotional support, or nurturance. Although the male does not think it necessary to be as tender and patient to his children as his wife should be, he expects himself (and the ideal father) to be loving, understanding of, interested in, and a companion to his children. Secondly, he desires to represent a good model for his children. Finally, the good father provides for his family's material wants and needs.

One is struck by the equalitarian view toward the husband-wife relationship held by our subjects. The subjects' responses indicate an absence of the attitude of role differentiation between husband and wife within the household. Just as the primary characteristic of the good mother is her nurturance, so do they see nurturance as their primary orientation towards the family. Discipline of the children is shared with the wife, but is apparently perceived as secondary to the presentation of a good model by both himself and his wife to obtain conformity. Such models are seen in terms of valued character traits, such as responsibility and dependability.

The perception of the husband-wife dyad as equalitarian does not carry over to parent-child relationship. For our subjects the primary characteristic of a good child is obedience and the ready acceptance of parental authority. Cooperativeness is listed as second in importance and strength of character as third.

The married males report that parenthood has brought changes in them. They claim to be more settled, mature, loving, patient and understanding. Parenthood has made them conscious of a greater sense of responsibility. One typical comment was that "I have to think of my family now instead of just myself." An element of sacrificing personal gratification is no doubt present in this last statement. It is not, however, as strong as comparable statements made by the married females. The married male considers himself as much entitled to gratification as any other family member, but no more. Our married females responded to the same question by stating that their own personal pleasures were clearly secondary to that of the family, and especially to the children. Typical comments made were that "When you have a family, you never think of yourself. You feel like you're in this world for something instead of being in it yourself," and "First come your children, then your husband, then you. You eat less and you dress less, and you do everything less because everyone else comes first."

It appears that the greater sacrifice of gratification and lessened feelings of individual value and worth might well cause this area of transition to be more difficult for the married female than for the married male. This difference will be discussed later in terms of psychological measures.

The men believe they have changed since high school. They feel they are more mature, realistic, have a more objective attitude toward life and are more independent. They claim to be more settled, less wild, self-confidence, more conscientious, ambitious, yet more relaxed. They feel a greater sense of responsibility for themselves and others. These changes are attributed about equally often to marriage, itself, and the very process of growing older. Only secondarily do they see these changes as having been caused by the assuming of responsibility for the family.

2. Roles of Wife and Mother.

The women in our study are a group for whom the shift to adult roles of wife, mother, and housekeeper came rapidly and with deliberate planning. Only 13 percent went to college, but few of those who did not go expressed regret at this in the follow-up study. On the contrary, these women expressed great satisfaction with their role accomplishments. Although there are some counterindications from the semantic differential and the TAT, these women are overwhelmingly positive in reporting their feelings of personal accomplishment since high school.

The daily life of these young women is primarily one of household management and child care. Some find time to read, knit, garden or watch television, but usually their time is filled with more pressing demands. While there were allusions to the arduousness of the daily schedule and a sense of confinement, reference to monotony and boredom is infrequent. For the present there are many pleasurable aspects of "taking care of your own home."

One such pleasure is the feeling of competency. The subjects claim real satisfaction from becoming a "good manager," a capable housewife, conserving where she can with an eye for tomorrow. One of the major distinctions our subjects made between adolescence and adulthood is the capacity to look and plan ahead rather than live for the moment. The subjects credit job and business experience before marriage as facilitating efficient housekeeping. Learning to handle one's own money is "training" for household budgeting and over-all planning.

To the 80 percent of these women who have children and the 20 percent who hope to, motherhood is the second central role. Parenthood is regarded by the subjects as one of the most meaningful aspects of their lives. Eighty-two percent of our sample plan to have three or more children. They see motherhood as a full-time occupation incompatible with outside employment. Two-thirds of the women expressed the view that the welfare of small children depends upon the mother's constant presence and supervision. There were only two working mothers in our sample; there were also seven wives who had outside employment which they expected to relinquish upon motherhood.

Together with their image of what parents should be, our subjects have definite ideas as to what a parent should do. Fifty-nine percent of the women said they will raise their children differently than they themselves had been raised. The changes were generally towards a more affectionate, more accepting, more equalitarian relationship.

If these opinions are influenced to any marked degree by current literature in the field of child rearing it was not apparent in the interviews. No reference was made in the interviews to child-study groups; Dr. Spock was only infrequently mentioned. Fifty percent of the informants stated, however, that when difficulties arose, they consulted their mothers, doctors or friends. Forty percent of the women stated that they used their own common sense in determining child-rearing patterns. Yet, even the most isolated of these women would be constantly exposed to the popular culture's notions through the mass media.

While their main preoccupation is with their home and children, our subjects do enjoy formal and informal social activities. Many of our subjects, however, state that this area is a source of frustration to them. Forty-seven percent complained of insufficient social interaction. For the present they feel themselves "tied down" and they are unhappy about it. Although they see their friends as similarly situated, this does little to lessen their individual dissatisfaction.

The most widely mentioned recreation was social participation. Ninety-seven percent of the women mentioned visiting with other couples in the evening. Seventy percent say they share all their friends with their husbands. Twenty-four percent of the respondents reported athletic participation. The women claim that when the children grow older, they will become "more active" in various organizations.

According to our subjects, limited financial resources account (at least partially) for the limitations placed on recreation. Although there were wishful references to the "really big evenings" of their dating days, the discontent chiefly appears in connection with the amount, rather than the type of social activity.

It is apparent from our interviews with these young women that marriage and family life are regarded as the sources of individual development and fruition, as well as frustration. Emotional involvement unquestionably colors the interpretation of family roles, and thus precludes objective assessment of performance from interviews. Bearing this in mind, we turn to the self-evaluation of our subjects.

Ninety-eight percent of the women consider themselves as having progressed as far as their contemporaries in terms of having children, a nice home, or a comparable income. The prevailing tone is one of contentment with achievement, although not necessarily with self. As married women and mothers they have met the cultural expectations. They are optimistic about the future. They find their lives better than those of their parents who married during the depression.

Sixty-four percent of the women state that they were "very satisfied" with what they had accomplished in terms of family life since high school; 35 percent were "satisfied"; only one said that things could be better.

There is consensus that marriage has occasioned personal growth. Our subjects speak of having learned to adjust to others and to plan with a long-range point of view. They perceive themselves as much more settled, serious, and less selfish. Increased self-determination and confidence are also attributed to marriage.

The horizons of the interviewees are, for the most part, limited to the confines of the wife-mother roles. The focal interest is the immediate family. When asked, "What are your plans for the future?" 79 percent replied with goals pertaining to motherhood. Twenty women hoped to acquire a larger residence or their own home. There are theme variations, but basically the philosophy is the same. Only 13 percent mentioned an objective not related to their major roles. They would like to study, read, travel, have part-time professional employment, or extend their friendships.

These seventy young women whose fundamental satisfactions derive from husband, children, and home, contemplate the future principally in terms of continuing domesticity rather than in terms of personal enrichment or expansion of interests. They anticipate betterment of their present circumstances, but not different circumstances, and forsee no change in the primacy of their roles as wives and mothers.

These young women seem to have a rather clear picture of the "proper" ways to feel and act as a wife and mother. Few of them voice concern over the various problems of marriage and motherhood, for example, child-rearing; yet, surely there are some who experience apprehension in this and other areas. It may well be that there is hesitancy to admit malaise with socially-prescribed roles. The quality of selflessness appears throughout the responses.

Such protestations shed further light upon the ideal of motherhood entertained by these women. One cannot help but ponder the emotional toll exacted by these demanding standards, the anxiety and guilt that may attend failure. The very nature of these ideals may create undercurrents of self-doubt not revealed on the overt level. Verbally, however, our subjects express satisfaction with their present status. They view themselves as "older and wiser," and predict further maturation.

The ideal wife, as envisaged by our sample, expresses emotional affiliation by warmth, consideration, understanding, loyalty, and sympathy. Her encouragement increases her husband's self-confidence, and her participation his pleasures. Adapting to the needs of the family, placing others before the self, she "creates a happy home." The view of the ego ideal shows quite clearly the value placed by the society, as seen by our subjects, on delay of gratification for the wife, and especially the mother. The selfless orientation required of these women conflicts sharply not only with wants and needs, but also past experience. It is curious that the ideal married male, while being attentive, solicitous, trustworthy, responsive, cheerful, and in other ways a good companion, need not be as self-effacing as the female. Even in the ideal, he is allowed gratification, status, and rights (in addition to the obligations) as an individual. But, married female, and especially the mother, is allowed only the obligations.

Some degree of the functional isolation of the married women in our sample was pointed up in their reports dealing with personal problems in the home and marriage. Solving personal problems was viewed as an integral part of the marital picture. However, only a small proportion of our subjects found it necessary, or desirable, to consult anyone on "personal" matters (as opposed to questions involving child care or home management). At whatever the psychic cost, the subjects have dealt with their own problems, keeping them in the private domain of the husband and wife.

Our subjects have a considerable investment of energy in the relationship aspects of marriage. Due to the responsibilities of the household and children, the women currently have limited opportunity available to them for emotional gratification outside of the home. The world they live in is highly personalized; its boundaries are defined by intrafamilial interaction and family objectives. The problems with which these women face are apparently being solved by them individually, with little assistance. There is little evidence of discussion with other women having similar difficulties of the private sectors of life.

Another agent which intensified this functional isolation is the value these women place upon close and constant care of the children as a necessary condition for their development. This, of course, precludes the widening of the life space through outside work. In addition to shutting out others, such an orientation would greatly increase the investment of women in the family, with concomitant emotional investment. Since so great a part of the life of the wife and mother is spent in the home, it is no wonder that on occasion small, every-day problems may elicit dramatic reactions. Again, social "reality testing" is precluded by the low amount of interaction with others; even if interaction were somewhat higher, emotional involvement would still be so high as to preclude thorough discussion of troublesome problems.

The mass media provide little help to the woman. Rather than showing her alternative approaches to meaningful problems, the mass media deal primarily with stereotyped solutions to equally stereotyped situations. The very situations which would be most conflictful for the married female would be the ones which would not be treated, or treated only sensationally, by the mass media. Equally important, the mass media portray the solution of problems from the standpoint of middle-class values which the women may or may not accept.

A final point should be mentioned. This pertains to the fact that the isolation of the married female is functional rather than absolute. That is, it is not so much that the female does not get to see her friends which causes the lack of free discussion, but rather the female does not discuss the problems in spite of interaction. On the behavioral level, there is little indication that the females are as socially deprived as they seem to picture themselves. On almost all measures of social participation, interaction, and activity, the married females are higher than their male counterparts. Married females belonged to more social clubs, card clubs, and sorority (or sorority-derived) organizations than do the males. The females claim 8 percent more purely social activities and belong to 34 percent more socially-derived associations than do the males. Further, the married females appear to be more socially active than are the single females.

It is apparently the intense involvement with the house and family of the married female and the large proportion of her time spent at home which cause her to feel frustrated by her "lack of social activity." The male spends at least nine hours a day out of the house (if only to, at, and from, work); to him, social participation is of value in and of itself. For the married female, social participation is primarily of value as a break in the all-too-pervasive routine, a way of separating her from her work.

CHAPTER V

THE SOCIAL LIFE OF YOUNG ADULTS

What are the social routes through which an adolescent establishes himself as an adult? This question is perhaps more easily investigated in a primitive or folk society where the social routes into adulthood are more clearly marked.

This chapter of our report describes the social behavior of young adults and some of the social routes through which they establish themselves as members of an adult group and community. In examining our data, we will also look for relationships between high school experience and young adult social activity. This section presents both aspects--the social life of the young adult and the high school antecedents of adult social behavior.

A. Friendship Patterns,[1] Organizational Membership and Social Transition.

Much of the social life of the young adult is composed of informal social activities and friendship groups and involves participation in more formal organizations on a voluntary basis.

American society differs from other societies in the degree to which its social life is characterized by the voluntary associations. (For opposing views see 56, 10, 63, 50, 138.) Associations are important integrating forces in society and serve as major links between the individual and various dimensions of the social system. One way, then, of understanding how the young person integrates himself into the adult world is by examining the extent and nature of his associational activity. Although there are many who have believed that secondary relationships were becoming more important to the organization of modern society, "there are indications that friendships may have an increased importance in cementing modern society together."[2] The number of friends a young adult has, how long he has known them and the context within which he met them are data which can tell us a great deal about the social aspects of the transition to adulthood. The topics of friendship cliques, associational activity and related data will serve as the major points around which this section is organized.

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[1] Our definition of friendship clique is from the viewpoint of ego, since the friends mentioned as "friends" were not themselves interviewed.

[2] Gouldner, A. W., and Helen P. Modern Sociology (New York: Harcourt, Brace and World, Inc., 1963), p. 328.

1. Friendship Patterns and Social Transition

Differences in styles of social life arise in part out of sex-role demands. Typically, the man's day is organized around his occupation. The woman's working hours have major focus within the nexus of the home and the family. Each of these structurally and physically differentiated foci involve the man and the woman in dissimilar allocations of time and energy, qualitatively different role demands, and concomitantly varying networks of social relationships. Are these factors reflected in different frequencies or styles of social activity? It is to be expected also that marriage would have a part to play in the determination of social participation. Single men, with more free time, display a greater amount of participation in our categories of social life.[1]

Little empirical research has been done on the role of complementary needs in the formation of friendships, although there is some evidence about the role of values in formation of friendships. It may be assumed, however, that friendships have functions which are not duplicated by any other kind of role-relationship. It has been pointed out that the role of friend provides a coherence for all the roles that a person plays. The need for this coherence is increasing as activities become increasingly segmentalized.[2] One's friends provide sources of influence, control, and emotional support.

The role of friend is the only role capable of helping to sustain and support all the roles a person is likely to play. A man plays many roles during each day and during his lifetime. For each of these roles, there are people involved who support and reward this particular role with specific relationships, whether it be the wife for the husband, the customer for the clerk, or the waitress for the man who is dining out. In the friendship role, however, it is the lack of specificity and the diffuseness of the social relationship which allows the growth of intimate and varied communication. Friendship is based on personal support quite apart from role performance (as on the job, etc.). Since a person's self and his self-concept are inseparable from the roles he plays, one of the most important criteria in choosing and maintaining a friend is the degree to which a friend is successful in helping to maintain a person's conception of who he is (the interaction of his roles). However, although no two people are identical in the nature and number of roles enacted, there are universal basic categories of role differentiation into which all people fall: sex and marital status. It should follow then, that any group of people divided on the basis of sex and marital status will draw differentially from sources of friendship simply on the basis of these two roles. A third important category of role differentiation--age--is of great importance, but because of the homogeneous age-composition of our sample, is impossible to consider except as a basis for future comparative study. It is expected that differences will be found among the married men, single men, and married women in our sample as to the nature of their friendship cliques.

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[1] Since the single woman sample is so small (N=7), the comparison will be between married men, married women, and single men.

[2] Lazarsfeld, P.F., and R. K. Merton, "Friendship as a Social Process," in A. W. and Helen P. Gouldner, Modern Sociology, pp. 338-343. Abstracted from "Friendship as a Social Process: a Substantive and Methodological Analysis," in M. Berger, T. Abel, and C. H. Page (eds.), Freedom and Control in Modern Society (New York: D. Van Nostrand Co., Inc., 1954), pp. 18-66.

Each subject was asked to name his close friends, how long each had been known and where the subject had met them. By asking about the source of the friendship and the social context within which it had occurred, it was possible to identify eleven categories: grammar school and neighborhood, high school, college, work, friends made through relatives, friends who are relatives, friends made through church, neighbors, service, other friends, home and miscellaneous.[1]

A summary distribution of the friends claimed by our subjects is seen in Table 28.

On the average, married women have more friends (mean 6.3) than do single men (mean 4.8) or married men (mean 4.5). The patterns of distribution vary somewhat between married and single

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[1] The following explanation is necessary:

Grammar school and neighborhood--for some people these two sources were similar in meaning. Since "neighborhood" friend usually referred to friendship of 13-15 years duration, or during the grammar school period, these two categories were combined. There were a few "neighborhood" mentions that were of less duration; these were specifically mentioned as having been formed during high school.

Relatives--people related to the subject either through marriage or blood.

Other friends--friends made through other friends.

Home--friends made at social functions in the home.

Miscellaneous--friends made at social functions outside the home.

TABLE 28

Number of Friends by Sex and Marital Status (Percentages)

Number of Friends	Married Men (N = 46)	Married Women (N = 68)	Single Men (N = 24)
None	4.3	0.0	4.2
One	6.5	2.9	4.2
Two	13.0	2.9	8.3
Three	13.0	10.3	8.3
Four	10.9	17.6	12.5
Five	17.4	10.3	25.0
Six	19.6	23.5	29.2
Seven	4.3	4.4	0.0
Eight	6.5	7.4	0.0
Nine or more.	4.4	20.6	8.3

men. Single men have smaller proportions claiming few friends (none to two), and larger numbers of friends (seven or more) than do married men, but a greater proportion in the middle range (four to six).

Table 29 shows what proportion of our sub-groups claimed at least one friend from the various sources of friendship (percent of group). It also shows what proportion of all friends claimed by the sub-group is accounted for by each category of friendship source (percent of all friends).

a. Elementary School or Neighborhood as a Source of Friendship

In childhood the elementary school or the neighborhood serves as the first source of primary relationships outside of the nuclear family and, as such, is of importance in understanding to what extent young adults still maintain ties with the experiences of early years.

TABLE 29

Sources of Friendship by Sex and Marital Status

	Married Men		Married Women		Single Men	
	Percent of Group N=45	Percent of All Friends	Percent of Group N=62	Percent of All Friends	Percent of Group N=22	Percent of All Friends
GS/N'hood*	46	25	41	12	74	40
High School	33	13	52	19	27	8
College	20	10	15	5	36	20
Work	29	12	32	10	18	5
Through Relatives .	22	15	43	16	0	0
Are Relatives . . .	6	2	23	8	13	3
Church	8	5	6	1	17	13
Neighbors	9	3	47	20	4	1
Service	9	4	0	0	17	4
Friends	9	3	4	1	4	1
Home	7	4	1	0	0	0
Miscellaneous . . .	9	4	10	2	22	6

*Elementary school and/or neighborhood.

The proportion of married men and married women claiming at least one friend from elementary school or the neighborhood is similar (46 percent and 41 percent). For married men, friends from this source account for one out of four friends (25 percent). However, the proportion of all friends accounted for by this category for married women is much less--approximately one out of eight (12 percent). Thus, in general, the school or neighborhood appears to be less important for married women than for married men, despite the similar proportions claiming at least one friend from this source. The situation is quite different for single men. Three out of four claim at least one friend from this source; four out of ten of their friends come from school or neighborhood.

In general, it would appear with the important qualifications mentioned, that this social context has importance for all three of our sub-groups. Single men seem to have much stronger links with this period of life (from early to late childhood) than do married men. Married women are the least dependent of all. Although a considerable proportion of the married women claim at least one friend from school or neighborhood, three other sources account for more of the variance both with respect to proportion of married women claiming friends from a particular source and the proportion of friends accounted for by this source. In a society segmentalized and organized around secondary relationships, it is interesting to note that over half of our subjects claim at least one friend from a period of life and a social context which does not bear directly on a young adult's present life and concerns. It may well be that during the beginning of one's adult career, many feel it necessary to maintain links with a more ordered past, a past represented by a friend from elementary school or the neighborhood.

b. High School as a Source of Friendship

High school should be an important source of friends for our sample, since social interaction is presumably a critical aspect of adolescence. For many teen-agers, graduation from high school means an official end to adolescence and the beginning of adult careers in work and marriage. For others, it means the continuation of education. Regardless of post-graduation career patterns, it is relevant to ask, "To what extent do friends from high school provide continuity with past interests and styles of life?"

High school differs somewhat from elementary school as a source of friendships. More married women claim friends from high school than they do from grammar school or neighborhood (52 percent compared to 41 percent). In addition the proportion of all friends claimed is somewhat higher (19 percent compared to 12 percent). For married men, high school appears somewhat less important than did the previous category, although it still has overall importance. One out of three married men maintain friends from this source. Approximately one out of eight friends of married men come from high school. For single men, the difference is dramatic. Compared to grammar school and neighborhood, from which three out of four single men drew at least one friend, only one out of four (27 percent) men claim friends from high school. Only one of twelve (8 percent) friends claimed by single men come from this source. High school friendships are apparently significant for married women of our group; only one other source accounts for as many friends.

c. College as a Source of Friendship

College attendance gains in importance each year as a prerequisite (symbolic and otherwise) for work and marriage.

In our sample, which ranged from working class to middle-middle class, 64 percent of the married men attended college for at least a year and 22 percent of the married women attended. All of the single men went to college for at least a year. If the proportion of the subjects who went to college is compared with the proportion of the subjects claiming friends from college, it is seen that approximately one out of three college men claim friends from that source, single man claiming aslightly higher proportion than married men. Of the married women who have gone to college, three out of four maintain at least one college friend. College is as important then, for this group of women, as grammar school and neighborhood is for single men. Assuming the opportunities for meeting friends in college are the same for males and females, other reasons (not apparent) then must account for this difference.

d. Work as a Source of Friendship

Work has meant different things to societies as well as to individuals. In traditional societies, work was the equivalent of staying alive. In some ancient civilized societies, work was to be endured even if somewhat of a curse. In modern society, man views work as giving meaning to other areas of life.[1] Regardless of the opinions and values regarding work throughout history, work is a major organizing principle which affects and controls individual and group life in any society. Although there is evidence that work is becoming less functionally related to other areas of social living, there is still much reason to believe that no other activity provides as much "social continuity to life as does work."[2] In considering the process of transition from adolescence to young adulthood, it is relevant therefore to ask to what extent the social life of our young adults is linked to work through friendships derived from this source.

Approximately one-third of the married men and women claim friends from work, with approximately equal proportions of all friends exemplified by this category. Thirteen percent of all married women work full-time, and 10 percent part-time, although 96 percent have worked full-time in the past. Ninety-eight percent of the married men are holding or have held full-time jobs. It would seem therefore that equivalent proportions of married women drew roughly the same proportion of friends from work as did married men despite the fact that most women are not presently working.

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[1] Tilgher, A., "Work Through the Ages," in S. Nosow and W. H. Form (eds.), Man, Work, and Society (New York: Basic Books, Inc., 1962), pp. 11-24.

[2] Nosow and Form, op. cit., p. 11.

If we consider only those single males who have worked full-time (87 percent), we find that the proportion retaining friends is somewhat below the proportion of married men claiming friends from work. The same is true for the proportion of all friends accounted for by all friends from work. In summary, work as a source of friends is less important for single men than for married men and women.

e. Relatives as a Source of Friendship

A state of confusion exists as to the nature of nuclear-extended family relations. Although there is general agreement that the importance of kinship is lessening (60,120), there are other trends mentioned in the literature on this topic which suggest important interactions continuing between members of a nuclear family and families of orientation (99,138). An indirect but effective way of understanding aspects of this is to examine the role played by relatives. This section considers friends met through relatives. The next section discusses the problem of relatives who are also claimed as friends.

A relative was defined as a kin through marriage (for the most part, the spouses of our subjects) and a blood kin (the family of orientation). Twice as many women claim friends through relatives as do married men. No single men claim friends through this category. Interestingly, the proportion of friends derived from this source differs little for married men and women, thus suggesting that married men who do claim friends through relatives do so at a higher rate than married women.

What "relatives" are these? Of those women who claimed having met friends through relatives, nine out of ten have met them only through their husbands. A small proportion of married women met close friends only through their sisters. Eight of ten men who have met close friends through relatives claim them through their wives. Of those claiming friends through their wives, 12 1/2 percent claim additional friends through their brothers, and 12 1/2 percent through other blood kin. Twenty percent of the married men having friends through relatives claim them only through their brothers. There is a greater tendency for married men to claim friends through their brothers, and for them to claim friends through dual sets of relatives. However, it is clear that for married men and women, those who meet close friends through relatives tend to do so through their spouses rather than their families of orientation.

The differences between the proportion of women claiming friends through relatives and the proportion of men doing so is substantial--about twice as great. The reason for this seems to revolve around the degree to which married men and women depend upon their spouses as potential sources for friendship. More women seem involved in their husbands' friendship circle than men in their wives'. M. Komarovsky has pointed out (87) that the girl is trained more for dependence throughout her training as a child and adolescent, whereas the boy is allowed greater parameters for independent behavior. These differences in sex-role training may find partial expression in the degree to which each sex depends on the other for finding and maintaining close friendships.[1]

f. Friends Who Are Relatives

This category has striking similarities to the preceding discussion. Though none of our three sub-groups has a large proportion of friends who are also relatives (the proportion of all friends accounted for by this category is also small), the married women have the highest proportion, with the single males intermediate, and married men the lowest. Of the women who claim relatives as friends, approximately half of them claim their own sisters. The other group claims husbands', relatives--mostly sisters and cousins. Married females are not only more relative-linked with reference to friends, but, in addition, their commitment seems to go into two areas of relations--either their own sisters, or their husbands' sisters and female cousins. Apparently, however, they do not go into both. For those married women who do claim relatives as friends then (one out of four approximately), it would appear that a principle of mutual exclusiveness is operating, a tendency to claim either her sisters as friends or her husband's female relatives. It may be that greater dependence training for the female relates to a higher proportion of married women claiming relatives as friends than married men do, but it appears that the choice between her own family of orientation and that of the husband's is also important.

g. Church as a Source of Friendship

The majority (over 75 percent) of our subjects are either members of a church or attend at least twice monthly. Although the single men are somewhat less active in church membership and attendance (married men, 87 percent; married women, 89 percent; single men, 77 percent), they have the highest proportion of any group claiming friends through church. In addition, they have the largest proportion of total friends from church although the proportion itself is not large (9 percent).

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[1] Komarovsky was making specific reference to the woman's greater dependency on her family of orientation; however, she does consider the possibility of the woman's having a generalized dependency on the husband. Our point of "friends through relatives" bears on this latter view.

h. Neighbors as a Source of Friendship

This category refers to our subjects' present neighbors. There are wide differences between married men and single men on one hand and married women on the other. Men in general seem to have a minimal involvement with close friends who are neighbors, compared with women, almost half of whom claim neighbors as friends. The situational availability of neighbors as friends probably plays an important part in this difference. As we have seen, only a small proportion of women are now working. In terms of time available for interaction near the home, the married women have a strong advantage over the men. Married women need relationships which revolve around mutual interests in problems and tasks relating to their roles as wives and mothers. This need is apparently met to some extent by relationships with neighbors, and as will be seen later, by memberships in informal social associations. The availability of neighbors apparently contributes to the differences between married men and married women in friendship involvements in the neighborhoods.

i. Length of Time Known

Almost one-half (48 percent) of all the friendships of single men are formed before high school graduation. The married men rank next with approximately four out of ten friends (38 percent) coming from that period of time. Married women draw least on that era, less than one out of three friends (31 percent) coming from grammar school, neighborhood and high school combined. Married women have known their friends a mean number of 7.9 years, married men 9.8 years and single men 9.6 years. Our group obviously has strong ties with their pre-adult years, maintaining close interpersonal relationships with old friends as they make the transition to the adult community.

Summary

Married women have more friends on the average, as young adults, than do married or single men. Single men draw on earlier sources of friendship, particularly from grammar school and neighborhood days. Though pre-adult sources of friendship are important also for married men and married women, their use of other sources of friendship is more evenly distributed. In addition to grammar school and neighborhood, married men claim friends from high school, college, work, and friends through relatives, mostly their wives. These sources account for the highest proportions of married men claiming friends and the highest proportions of all friends claimed. Though these sources are used by single men (with the exception of friends through relatives), they are not as important for them as are grammar school and neighborhood. Important sources for women in addition to grammar school and neighborhood are high school, work, friends through relatives, friends who are relatives and neighbors.

For the married men, there is no single source from which a majority draws at least one friend. However, almost one-half of the married men claim friends from grammar school and old neighborhood days, and one-quarter of all of their friends come from that period of time. A large minority of the married men still look to the "old days" as a partial source of reinforcement and emotional support. The presumed change in style of life which occurs with marriage and the gaining of an occupation occurs for at least a substantial minority of our married men with friendship carry-overs from the past.

Less than one-third of the married men claim friends from work; this source accounts for 12 percent of all friends claimed by married men. Does the lack of "work friends" on the part of the majority of married men imply a lack of commitment to work itself? Is this a state peculiar to young married men, or is it common throughout life? Or is the work situation mediated by friends at work who are not seen as close friends in a more general sense?

A measure of residential stability since high school indicates that those men who have moved out of the neighborhood in which they were living while they were in high school differ substantially from those who have remained in that neighborhood with respect to friends from work. The proportion of the geographically mobile group claiming friends from work is more than twice that of the stable group (34 percent compared to 15 percent). It appears that a young man is more likely to claim friends from work if he has moved out of his high school neighborhood. But even for this mobile group, a majority do not claim close friends from work.

Though only one out of five married men claim friends through their relatives, 15 percent of all friends claimed are from this source (the second largest source for married men with respect to proportion of all friends claimed). This suggests that the young married men in our sample who claim friends through their relatives (mostly their wives), do so at a greater exclusion of other sources.

There is no source of friendship which is claimed by a strong majority of married women. Elementary school is less important as a single source for married women than for men. Over half of the married women claim friends from high school, a sources less emphasized by both married and single men. We have already indicated the strength of work as a source of friendship for married women, approximately equivalent to that for married men and greater than that claimed by single men. Although twice as many women claim friends through relatives than do married men, the proportion of all friends accounted for by this source is equal to that of the married men. Though only one out of four married women claim relatives as friends, this proportion is approximately four times greater than the proportion of married men claiming friends from that source.

The only source of friendship which was used by a strong majority of the group are the elementary school and the neighborhood category. For the single men no other source approaches these proportions. Even high school is much less important. It may be that single men make fewer friends in high school because they carry their grammar school and neighborhood friends with them at a higher rate than the other two sub-groups. Work as a source of friendship is less important for them than it is for married men and women. Single men also show a somewhat higher interest in sources which are unimportant for married men and women: church, military service and miscellaneous sources are stronger categories for single men.

2. Voluntary Associations and Social Transition

a. Formal and Informal Associations

One of the channels that relates the young adult to the community in which he lives is his membership and participation in organizations. Organizations touch several vital sectors of his personal life--political, religious, educational, civic, recreational--and serve to integrate the individual person into a wider sometimes subtle network of values, norms and lines of communication. As we have just seen, membership in these organizations also serves as a source of friends so that the gains from participation meet a variety of personal needs. This section examines the pattern of participation of young adults in both formal and informal organizations.

TABLE 30

Membership in Formal Associations*
(Percentages)

Number of Associations	Married Men N=46	Married Women N=70	Single Men N=24
None	11	14	21
1	37	34	25
2	24	29	46
3	20	11	4
4-7	9	11	4
Mean	1.85	1.77	1.54

*Membership in formal associations is shown for the research group in Table 30.

Though differences among the mean levels of participation for each group are not large, it is of interest that the single male has the smallest average membership in formal associations despite the greater amount of free time presumable available to him. He has the highest proportion of non-membership in formal associations and the highest proportion of people with two formal associations. However, his lower average membership, and his lower proportions in the higher frequencies of membership (3 and more) suggests that there is a tendency for the single male to be less involved in formal associations than the married male or female; he is apparently less tied to the collective concerns of community and society.

The total number of memberships in informal associations[1] was examined next (Table 31).

TABLE 31

Participation in Informal Association
(Percentages)

Number of Associations	Married Men	Married Women	Single Men
	N=46	N=70	N=24
None	57	36	54
1	35	47	42
2 and above . . .	9	17	4
Mean	.54	.87	.50

Membership of this type also varies by sex and marital status. Married women are more active than either married or single men. Though the difference between married men and single men is not large, the single men are again less active. Through the evidence, it suggests that the voluntary association, one source of primary, face-to-face interaction, is less available or important to the single male in his transition from adolescence to young adulthood.

The voluntary association, formal and informal, has several functions. It links institutional sub-systems with one another (for example the PTA may act as a link between the school and the family), and it may mediate between the individual person and larger organization. Voluntary organizations also provide intervening social processes between the individual and the greater society (55). In making the transition from adolescence to young adulthood, single men seem somewhat more isolated from important integrating process offered by voluntary associations.

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[1] "Informal" refers to associations organized for "social" reasons.

Married men are less active than married women in informal associations, possibly because of differential opportunity to engage in these activities; many of the women's groups meet during the day. Another possible contributing factor may be inherent in basic differences in the tasks to which men and women address themselves after graduation. We suggest that the primary concern of the male in his early adult years is work. For women it is marriage and raising a family. These tasks differ not only in goals; there are several other important differences.

The occupational social system into which men move after school, has relatively formal standards of performance with built in rewards and punishments which have been developed by the work organization. These standards or norms provide a means for evaluating a man's output and performance. In addition, a typical work organization has social history of its own with informal rewards and prohibitions which can be brought to bear on participants, particularly newcomers. The work context also involves superiors, who may be used as role models, and peers, with whose behavior and performances the young male may compare his own. These conditions serve as major sources of social and emotional support and control for the young adult male during the first years of adulthood.

The married woman, for the most part lacks this kind of systemic support and context for evaluation. She does her work as a mother alone; for her the formal system or context, with its goals[1] and support is not apparent. Her role behavior, though theoretically predictable in terms of social class, ethnic group, personality dynamics, and other interacting variables, is not a function of formal system which existed before her arrival. With her husband, she begins her own family system. The evaluation of her performance is more difficult, both for others and for herself. Potential role models (mother, older women) are usually not present in the physical situation. Although it is true that guidelines for behavior are available (mass media, family of orientation, friends, etc.), they are not, as in the case of the male, present within the context of the work situation itself. This suggests that the married woman's informal social activities provide contact with the outside world at a time when, charged with the responsibility of a growing family, she desires relationships with people who share her problems and doubts.[1] This point is of special relevance when we consider that the married woman shows dissatisfaction with her social life in spite of a generally higher level of social activity than that of men.

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[1] G. C. Homans has made the well-known distinction between "external" and "internal" systems in his Human Group (76). To be sure there are general cultural norms for wifely and motherly behavior which may be "external" to the married woman, but Homan's "system" is in reference to organizational parameters of behavior, not cultural.

A number of sex and marital status differences appear with respect to the nature of these associations in which the young adult participates. Associations were divided into four major categories of orientation: work-derived associations, church related associations, community oriented organizations and social groups having no structural ties to other institutions or social system. These groupings cut across formal-informal dichotomy and emphasize, rather, the social rationale of the association. Several other categories involving small numbers of our group are not shown here.

TABLE 32

Participation in Four Kinds of Association:
Work, Church, Community, Social
(Percentages)

Types of Association	Married Men	Married Women	Single Men
	N=46	N=66	N=23
Work	47	6	26
Church	24	36	39
Community . . .	11	23	17
Social	28	55	22

These categories provide interesting differences among our three groups. In associations related to work, married men have the highest proportion of membership. It is also the category in which the greatest number of married men take part. It represents memberships in unions, professional, and semi-professional associations and a few sport teams derived from work. The single male membership is only half that of the married male. What accounts for this difference? Perhaps this difference in work-derived association membership reflects a lower level of commitment to work on the part of single males as compared to married males. A similar trend was noticed in the preceding section with respect to close friends met at work.

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[1] See section IV, C, 2, for analysis dealing with the married female's view of herself and her peers. See also Section IV, A, 2 with regard to the "functional isolation" of the young married woman.

Although the membership in church-related activities does not vary much from sample to sample (approximately one-third of the married women, approximately four out of ten single men and one-quarter of the married men belong), it is surprising to note that the single males have the highest proportion of associational activity, since, as a group, they have a somewhat smaller proportion of people claiming church membership or attending at least twice monthly. Analysis of the data indicates that those single men who claim church membership or attend church regularly are more likely than are married men or married women to belong to related associations. Also there is more of a tendency for non-members (single males) to join church related activities. Church associational activity seems to be somewhat more important for single males than for married females and (especially) married men.

Community-oriented associations are not a strong focus of membership for these groups. The married women have the largest proportion claiming membership in this category (approximately one out of four); married men have the smallest proportion claiming membership in community oriented activities (approximately one out of nine), single men are intermediate (approximately one out of six). Though none of the sub-groups has a heavy participation, it is interesting to see that the married men are least active. The low-level of activity in these groups may reflect an age factor; greater involvement is likely as their children grow older.

More than half of the married women belong to associations of a "social" nature. The men are less involved in this kind of activity, although the married men are somewhat more active than are the single men.

b. Social Activity

Another measure of the extent of informal social activity of our group was based on the question, "Describe your social activities last week, if typical." If the week was not typical, the respondent was asked to describe a typical week. A tabulation of the total number of social activities is shown in Table 33.

TABLE 33

Social Activities During Typical Week
(Percentages)

Number of Activities	Married Men N=46	Married Women N=69	Single Men N=24
None	7	1	8
1	15	7	13
2	35	22	8
3	17	39	25
4	17	20	25
5	7	12	4
6	2	10	4
7	0	1	13
Mean	2.52	3.47	3.37

Married women and single men are more active socially than are married men. The proportion of married women engaging in three or more activities per week is almost twice that of married men. The higher frequency of social activity corresponds with the tendency of married women to belong to more associations and have more friends.

c. Summary

Single men are least active in associations. Married men have somewhat more involvement in formal associations than married women, whereas the reverse is true for informal associations. If the kind of association is examined, it was noted that almost half of the married men belong to associations related to their work, a proportion twice that of the single men. Single men and married women participate in church related organizations to a higher degree than do married men. Community oriented associations seem to draw the least interest from our sub-groups in general, though married women are the most involved. Associations of a social nature involve more than half of the married women, a proportion twice that of the married and single men. We have also seen that during a "typical week," married women are the most active, slightly more so than single men, and somewhat more so than married men.

3. Conclusions

We have examined certain aspects of the social lives of young adults in an attempt to understand more clearly the process by which a young adult integrates himself into his community. On the most broad level of interpretation, it appears that young married women are more active socially than the other sub-groups. They have more friends, belong to more associations and are involved more frequently in social activities. Married men belong to more associations, formal and informal, than single men, although single men have slightly more friends on the average and go out more often during the week.

The social life of the single men is less tied to associational activity and by implication is more isolated from the society. Single men have fewer linkages to work, both in terms of friends derived from work and associations related to work. They are more idiosyncratic in sources of friendship, drawing to a greater degree than do the other sub-groups from miscellaneous sources. Almost half of their friends date from pre-high school graduation days. The young married woman is the most present-oriented in this regard, with one out of three friends dating back to this earlier period.

It appears that the question of the social routes through which young adults enter into the community are closely related to sex-role and marital status. However, these data raise a number of questions. Although it is theoretically an organizing arena of life, work does not involve a majority of our male sample with respect to associations or close friends. Is this a function of the age of our sample or is it common to all periods of life? Community-oriented associations draw the attention of only a small proportion of our sample. Is this related to age or social status of our group or is it common to other status levels and periods of life? Though there are a number of studies which address themselves to the question of voluntary associations with respect to social class, social mobility, neighborhood integration and kinship interaction, the studies are not age-specific, and therefore not comparable. The question of how a young adult integrates himself into his community and society must remain partially unanswered until the nature and the extent of the adult's integration into the community and society is more completely understood.

B. Social Facility in High School and Young Adult Experience and Achievement.

It has long been assumed that important aspects of socialization take place within the context of associations and friendship cliques. Moreover, theorists of psycho-social development emphasize the initial influence of social experience during adolescence in developing competence, self-concept and validation of personal worth. Thus social activities and associational memberships presumably have particular relevance in preparing the teenager for adult experience. Our project was based on these considerations: How does level of social activity during adolescence relate to the level of social activity during young adulthood? How does social experience relate to performance in non-social areas of behavior at both adolescent and young adult phases? Our data on these issues will be presented in the following categories of analysis: the relationship of high school social measures to young adult social measure; the relationship of high school social variables to one another and to "non-social" aspects of high school life, such as academic achievement; the relationship of high school social participation to "non-social" activities and levels of performance in young adult life.

1. High School Social Interaction and Young Adult Social Life.

Extensive social interaction is an expected mode of behavior in high school. Indeed, even the elementary school is probably host to such expectations. If this is so, then those students who make high scores on the high school social measures are assumed to be successful in meeting the prevalent social norms of the school. In this section we will inquire whether social success in high school manifests itself in continued extensive social interaction in young adulthood. We will first examine the interrelationships of the high school social variables.

a. Social Interaction in High School

The high school social variables involved in this analysis were: 1) informal school associations; 2) in-school informal associations; 3) number of mutual choice friends; 4) number of friends claimed; and 5) proportion of friends claimed who were attending the high school during our subjects' senior year. The use of several variables to measure social activity raises a question about the communality among these measures, or the extent to which they tap a general social facility. Table 34 presents the correlations among these variables.

It is apparent that the intercorrelations do not indicate a unitary characteristic of sociability. Although there was a moderately high relationship between informal school associations (jacket club membership) and mutual choice friends, no clustering

TABLE 34

Intercorrelation Among High School Variables
(Pearson Product Moment Correlation Coefficients)
(N=117)

	Mutual Choice Friends	Informal Associations	Formal Associations	No. of Friends Claimed	Proportion of Friends in High School
Mutual choice friends	. . .				
Informal associations	.42*	. . .			
Formal associations	.05	.16	. . .		
No. of friends claimed	.10	.06	-.06	. . .	
Proportion of friends in high school	.28*	.01	-.14	-.21*	. . .

*Significant at .05 level.

of the several variables appeared. In addition, there was little difference between males and females in membership in formal and informal associations in high school, although the females had somewhat more mutual-choice friends than did the males (see Appendix I, Table 6).

The analysis of data provided by the intercorrelation of the high school social variables was supplemented by the selection of a group of students with high social visibility and social skill to be compared with a control group of socially "average" students. The high school approximates a sub-culture with its own norms and sanctions, and the success of an individual student in meeting social expectations becomes readily apparent. The socially prominent boy or girl, as a highly rewarded person, may receive psychological gains from this experience that the average student does not acquire. To examine how such high status individuals differ from the sample as a whole and to determine whether an impact of social success in adolescence affects performance in young adulthood, a group of socially elite was selected on the basis of popularity and prestige positions in formal organizations. A control group was selected, matched with the elites on the basis of IQ, ISC, and sex, but which held no offices in prominent organizations. It was found that the elite group belonged to more formal school organizations, more often belonged to informal organizations (jacket clubs) and had more mutual choice friends than did the students in the control group. Further comparisons of these groups is presented in the following section of this chapter.

b. Relationship Between Social Activity in Adolescence and Young Adulthood

This section focuses upon the question: Are individuals who are relatively high in social activities in high school also relatively high in social activities as young adults? To investigate this question the high school social variables--a number of mutual choice friends, participation in formal school organizations, and jacket club membership--were correlated with three young adult social measures: number of close friends claimed (Social Index II); extent of organizational membership (Social Index I); and frequence of social interaction per unit time (Social Index III). None of the correlations were significant at the 5 percent (Table 35).

There are persuasive theoretical arguments for expecting continuity of social success and activity between high school and young adulthood. If social success is a function of specific personality traits, these traits should manifest themselves in both high school and young adulthood. In addition, a person having extensive social interaction in high school would tend to carry learned social skills into later periods of life. Developmental task theory would be congruent with this point of view (69). The lack of relationship between adolescence and young adulthood clearly questions these theoretical expectations.

Another point should be examined, before attempting to explain these data. It is possible that continuity of social skills and participation from high school to young adulthood exists only for those who are the most successful. If the relationship through time is direct and linear, then those students who were outstanding socially in high school would show a high degree of social participation in young adulthood. Data on this point are presented in Table 36 by comparing young adult social activity for the elite and control groups described earlier.

A statistically significant difference between the high school elites and the control group appeared only on the composite social index, although the distributions suggest a trend in the direction of continuity of social behavior.

TABLE 35

Comparison of Social Facility in High School and Young Adulthood (Pearson Product Moment Correlation Coefficients)

High School Social Participation	Number of Close Friends	Membership in Associations	Frequency of Social Interaction	
	Total Sample N=117			
Mutual Choice Friends	.10	.13	.01	n.s.
Formal School Associations	-.06	+.07	+.13	
Informal School Associations	+.06	-.09	+.11	
	Males N=56			
Mutual Choice Friends	+.12	+.07	+.08	
Formal School Associations	-.06	+.07	+.22	
Informal School Associations	+.10	-.06	+.14	
	Females N=61			
Mutual Choice Friends	-.02	.14	-.09	
Formal School Associations	-.09	+.06	+.05	
Informal School Associations	-.03	+.19	+.06	

TABLE 36

Young Adult Social Participation of High School Social Elite

Young Adult Social Activity Membership in:	Social Elites	Controls	
Number of Friends			
High	7	2	X^2=n.s.
Low	7	12	
Number of Formal Associations			
High	10	7	X^2=n.s.
Low	4	7	
Informal Associations			
High	4	6	X^2=n.s.
Low	10	8	
Social Index*			
High	9	2	X^2=5.3903$^+$ P = .025
Low	5	12	

*Based on a equally weighted sum of informal associations, formal associations and number of mutual choice friends.

One explanation of these negative findings is that social activities in high school and social activities in young adulthood are not functional.

An interpretation of the psychological meaning of these data must take into account the fact that the high school senior class represented a group which had few social isolates. Most of the class had friendship cliques either within the school or in the neighborhood; almost all held memberships in either formal or informal organizations (46). It is possible that the amount of social interaction necessary for adequate psycho-social growth has been overestimated and the quality of social interaction has been confused with quantity of social activity. This suggests that there is a minimum level and perhaps quality of interaction that is essential in adolescence and that an active social life may or may not have relevance for the developing personality.

2. The Relationship Between High School Social and Non-Social Variables.

If the importance of high school social activity is phase-specific, serving particular functions for adolescence rather than preparing the teen-ager for adult roles, it is possible, perhaps likely, that social activities will show more definite relationships to other high school performance measures than to adult achievement. An analysis of the high school data was made to examine the relationships among these several areas of behavior (Table 37).

TABLE 37

High School Social Participation and Academic Performance (Pearson Product Moment Correlations)[*]

	Total Sample N=296	Males N=144	Females N=152
Informal Associations With:			
Rank in Class	.09	.05	.12
Grades	.14[+]	.20[+]	.05
Disparity Scores	-.07	-.05	-.15
Formal Associations With:			
Rank in Class	.17[+]	.05	.30[+]
Grades	.23[+]	.24[+]	.24[+]
Disparity Scores	.07	.03	.13
Mutual Choice Friends With:			
Rank in Class	.05	-.06	.12
Grades	.23[+]	.24[+]	.13
Disparity Scores	.06	-.11	.02

[*] Based on all cases available; computations for follow-up group show highly similar results.

[+] Significant at the .05 level or better.

For the total sample, grades correlated significantly with all three of the social measures, although they were somewhat higher with formal associations and mutual choice friends than with informal associations. For the male sample, correlations between grades and social measures show a similar pattern, for only formal associations achieve a significant correlation.

For the total sample, rank in class shows a significant correlation with formal associations, but not with the other social measure. For the male sample there is no significant correlation between rank in class and the social measures, whereas, for the female sample a significant correlation is reached with formal associations. There are no significant correlations between disparity scores and social measures. These correlations suggest that if any relationship exists between the social life of high school students and academic performance it is very small.[1] The only academic variable which achieved consistent correlation with all three social measures was grades, and that correlation was of a low order and showed for the male sample only.

3. The Relationship of High School Social Activities to Non-Social Young Adult Variables.

The data presented in the above section indicate only a slight association between social variables and academic performance. On the basis of the idea that social experience in adolescence prepares the teen-ager for adult achievement in a more global sense, it is possible that social facility in high school is related to performance in non-social arenas of young adult performance. We turn now to the question of the relationship between the level of social interaction during high school and non-social activities in young adult life.

The high school social variables (number of mutual choice friends, participation in informal school associations, and participation in formal school associations) were examined in relation to the following young adult variables: ISC, level of income, expressed satisfaction with work, expressed satisfaction with people, interviewers' ratings of adult role acceptance, social mobility and college attendance (Table 38).

Only three of the 42 correlation coefficients in Table 38 are statistically significant. These may show a relationship between college attendance and social facilitation in high school. Otherwise, there appears to be little evidence for an association between high school social interaction and adult achievement.

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[1] A similar analysis of social and non-social measure in young adulthood gave correlations which were also low or insignificant.

TABLE 38

High School Social Activities and Young Adult Non-Social Variables

Variables	ISA		FSA		MCF	
	Male*	Female	Male	Female	Male	Female
	N=56	N=61	N=56	N=61	N=56	N=61
ISC	-.02	.01	-.02	.22	.11	.14
Level of income . . .	-.10	.00	.00	.13	-.21	.11
Satisfaction with work	-.15	.23	.06	.03	.11	.12
Satisfaction with people	.16	-.01	.04	-.16	.07	.06
Interviewers' Ratings	-.12	-.02	.06	.18	-.05	-.02
Social Mobility . . .	.00	-.03	-.02	-.04	-.01	-.06
Level of Education	.09	-.06	.27	.23	.26	-.02

*Significance at 5 percent - .260.

+Significance at 5 percent - .250.

Additional evidence comes from an examination of the performance of the high school social elite on non-social variables in young adulthood. (Table 39).

These data support the conclusion that a high degree of social experience in high school does not necessarily tend to lead to relatively high performance in non-social sectors of adult life.

TABLE 39

Performance of the High School Social Elite on Non-Social Variables in Young Adulthood

Occupational Status	Social Elites	Controls	
High	12	8	X^2=n.s.
Low	8	12	
Salary			
High	14	12	X^2=n.s.
Low	6	8	
ISC			
High	11	6	X^2=n.s.
Low	9	14	
Social Mobility			
High	10	7	X^2=n.s.
Low	9	12	
Rating of Role Acceptance			
High	8	7	X^2=n.s.
Low	6	9	

CHAPTER VI

PSYCHOLOGICAL FEATURES OF TRANSITION

One of the most prevalent beliefs about American culture has been that after the storm and stress of adolescence, young adulthood is a relatively quiescent period and a time of little difficulty.

This belief however, is founded on cursory observation, for little is known of the psychic life of young adults. Studies of adolescence generally assume an "all is well then" attitude about the period that follows. Discussions of development in psychological literature frequently end with adolescence, and it is often suggested that life can never again be as difficult. The image of the young adult that is implied in these works is of one who somehow emerges with problems resolved from a prior period of confusion.

More significant theoretical issues are involved in the question of the consistency of psychic life and in the relationship of adult mental and emotional states to antecedent experience. More specifically, what evidence is available in our data that high school experience is predictive or is associated with personality measures of young adulthood? This chapter attempts to examine these questions by analyzing data from a self-report instrument, the semantic differential, and an indirect source of inner psychological dynamics--the Thematic Apperception Technique (113).

A. Self-Evaluation and Sex Roles.

When adulthood is considered apart from adolescence, there is a tendency in both the popular and professional literature to emphasize the problems of women. Women have been described, and have described themselves, as "trapped," neurotic, unstable, unproductive and confused. Through the various writings that deal with the topic of "what is wrong with the American woman," there is the implication that her difficulties have a good deal to do with the kinds of activities that are expected of her at this time of life. The work of many women is generally limited to housework; and described, at best, as routine and non-constructive. In the various statements about her and by her, one finds the implication that her work and life seem circular to her; that she experiences a good deal of security but finds little in life that is challenging; that she approaches life less with a sense of enthusiasm than with a sense of fatigue; and that she sees no end to her treadmill existence. Intermingled with a sense of self-sacrifice are recurrent and disturbing feelings of disappointment, self-blame and self-pity. The image that emerges is that early adulthood is a difficult time of life for the young woman.

In contrast, one finds little in either the popular or professional literature about the problems of the American male during the period of early adulthood. This is perhaps not surprising when one compares the social expectations governing the behavior of the young adult male with what had been expected of him during adolescence. The period of adolescence tends to be a restrictive period for the adolescent. It is a period in which he is regarded as a dependent; while the period of young adulthood is one in which he is recognized as an active participant in the productive life of the society. When he is productive, he is rewarded; insofar as what he does is positively valued by the society, he gains a sense of fulfillment. For many males this is the first time they actively participate as producing members of the community; and, conversely, this may be the first time in which the adult society recognizes them and rewards them as active participants and contributors.

This implies a close relationship between cultural values and personality; and, indeed, it is the purpose of this sector of the research project to examine the relationship between a specific cultural value--productivity--and one dimension of personality, self-evaluation. It is the main thesis of this research that those whom society regards and rewards as most productive will have an enhanced sense of self-esteem; and, conversely, that those who participate in work on which the society places a lower value will have a relatively lower sense of self-esteem.

Women, especially married women with small children, are usually not employed and are thus not integrated in the formal occupational system where rewards (especially money, prestige, and power) are given on the basis of performance. During the period of young adulthood, many women tend to be isolated from the formal systems of the society, and, on the basis of the foregoing proposition on the relationship of productivity to social recognition and self-esteem, we would expect them to experience a lesser sense of self-esteem than would working people. On the other hand, early adulthood may be a period of considerable formal participation and reward for men who are working; and we would therefore expect them to perceive and evaluate themselves positively. This general proposition is examined in our study by comparing the self-evaluation of males and females in young adulthood.

Although measures of self-perception in adolescence were not used in the high school study, systematic measures were used in the follow-up phase in order to assess the self-concept these young adults hold of themselves. It was our purpose to relate these views to the adolescent experiences and to the available measures of success in young adulthood.

The technique employed was a modified semantic differential (118). This instrument was composed of twenty-five polar adjectives, deemed relevant both to personality and to this age period. Subjects were asked to complete the instrument to describe the following categories of persons or concepts:

Perceptions of the Self

Myself as I really am
Myself as I would like to be
Myself as I expect to be in five years
Myself as a senior in high school

Perceptions of parental figures

My mother
My father
My mother as I remember her in high school
My father as I remember him in high school

Contemporary figures

Most men my age
Most women my age
My spouse

This instrument is a self-report method for gathering information, subject to some distortion in that the subject has some knowledge of the picture he is presenting of himself and may not be willing to disclose his true feelings. However, it gives a pattern of self-image that the young adult is willing to present to the world and close examination of the replies yields several characteristics that are of importance to the study of the young adult.

1. An Overview of the Follow-up Group

One of the striking characteristics of these young adults is that they tend to see themselves quite positively. They describe themselves as benign (very good, pleasant, sweet and nice) and also as being both quite steady, firm, and responsive. The mean scores of the total group are shown in Appendix 10, Table 1.

This table shows an image of an adaptable group, with little to suggest either impulsiveness or rigidity. Rather, there seems to be an element of friendly flexibility. It may be that young adulthood is a rather quiet period, compared to the tumult of adolescence.

The meaning of these data will be more apparent when we compare these figures on current self-perception with self-perception at other times and perception of other objects. We compared the subjects' view of themselves in relation to their view of peers; and contrasted their beliefs about how they have changed and how they expect to change in the future. The overall response is presented in Appendix 10, Table 3.

The subjects remember themselves in high school as having been well intentioned (very nice, pleasant, and good), but also as having been considerably more unstable (changeable, fluid, unsettled and wild). The greatest perceived change since then has occurred on the settled-unsettled scale, in the direction of settled. Other perceived changes include a sense of being more sure, steady, full and tame in young adulthood.

There is a greater sense of stability here; this is a calmer more controlled group. Inner controls seem to be more effective than in high school. It may well be that the instability and fluctuations of the adolescent personality are largely a function of two social and personal factors that determine the adolescent's inner life: 1) the influence of outer controls, and 2) the lack of inner purpose and self-determination.

Apparently a good deal of integration occurs in the transition to young adulthood for the young adults see themselves as being considerably more settled, sure and steady. On the other hand, they may be more familiar with the roles which they must play, and that they have described themselves accordingly.

The subjects of our group expect to be more stable and settled in five years. They also expect to be more oriented towards others without being overly amenable to influences or inner changes--they expect to be considerably more responsive but not suggestable. Thus we get a picture of the expectation of inner stability, self-confidence and personal security; and from this sense of inner security, they will be able to respond without being too easily influenced.

This is a considerably different picture from the high school self-configuration, which suggested that they had been reactive and erratic and had lacked this inner strength. They seem to be somewhat better integrated and more self-accepting, and they hope to change in this direction in the future.

These young people are optimistic about the future. On most scales, expectations of self in five years corresponds quite closely to ideal self. They see themselves moving in the direction of greater stability than they had previously experienced. However, this greater stability seems to carry with it the implication of a lessened impulse life. Perhaps they are concerned that if they become too steady they will lose some of the excitement and spontaneity of youth.

2. Sex Differences in Self-Perception

Several sex differences are apparent. Table 3 in Appendix 10 shows the mean level of response for males and females. In general, males describe themselves as being much more active, zestful and intense than do females. Their responses to "myself as I really am" are higher on the active, strong, steady, flexible, fast, deep, firm and quick scales. Females describe themselves in milder and more peaceful terms: they see themselves as being more giving, mellow, sweet, settled, soft and tame than do males. This seems to be an image of a nurturant and accepting group. The pattern is similar in their perception of "myself as a senior in high school" and "myself as I would like to be." Females tend to present an image of themselves as passive, receptive and submissive, while the males seem to be quite energetic, forceful and dominant.

Interestingly, the pattern does not entirely persist in their responses about "myself as I expect to be in five years." Males expect to be even more active in the future than they are now. It would appear, however, that females expect to change in a direction that is more indicative of greater stability than of spiritedness and vigor. Females expect to be more stable, but also more tender and nurturant. Both males and females want to change in the direction of predominant cultural stereotypes.

Those males and females who had married at the time of the follow-up study were compared. These results are also shown in Table 3, Appendix 10. The married males describe themselves as slightly more stable at the present time than do the married females. Marriage apparently has quite divergent effects on men and women, insofar as stability is concerned, for the two groups did not differ in their views of themselves as stable in high school. However, the married females do expect to be more stable in five years than do the married males, even though they describe themselves as being slightly less stable at the present time.

Both groups perceive themselves as having changed considerably since high school. Married males see themselves as more active both now and when in high school than do the married women. They do not differ, however, in the extent to which they expect to be active in five years: married females expect to be much more active than they see themselves as being at the present time, and they expect to be as active as the married males.

Their perceptions of their peers as compared with their perceptions of themselves provide one of the most significant indices of the differences in the meaning of the young adulthood period to married males and married females. The subjects' responses to "myself as I really am" were compared with responses to "most women my age" for the females and "most men my age" for the males (Appendix 10, Table 1). Perceptions of self and of peers were then compared to ideal for each individual to determine whether the self or peers corresponded most closely to this ideal. While married males saw themselves better approximating their own ideal than they perceived their peers, married females consistently saw their peers as being much closer to their own ideal than they saw themselves.

It would appear that marriage, at least in the early years, produces quite divergent frames of reference by which males and females--or husbands and wives--evaluate themselves, especially in relation to others similarly situated. Married women tend to evaluate their peers more positively than they evaluate themselves, while married males tend to evaluate themselves a little more highly than their peers.

It may be that for married females early adulthood is a period of relative isolation. Their major sustained interaction is generally with their pre-school-age children. This kind of isolation may produce lowered self-esteem and self-acceptance and a higher estimation of peers.

For married males the period of early adulthood is quite different from that of the married females in the nature of the conditions it provides for self-acceptance and approval. Married males in our group were employed, and are therefore much more firmly integrated in the occupational and family systems. Perhaps the present period stands in such sharp contrast to their experience as adolescents that they tend to overlook the possibility that their peers are experiencing similar satisfactions, for married males do not appear to hold their male peers in as high esteem as they see themselves.

There appears to be more continuity of expectations, in several realms, for the male between high school and young adulthood than there is for the female. As a young adult the male is expected to be task oriented--to be decisive, strong and capable of successfully completing tasks. There is little difference in these expectations from those present in high school.

For the married females, however, the expressive-nurturant-passively dependent role is new. Gratification comes mainly in terms of success of the family group. Whereas the male can gain satisfaction from his occupational successes, the married female can experience this only vicariously. Our married female subjects were quite articulate in expressing the societal expectations of the wife and mother to be selfless, to postpone if not eliminate her personal gratification. To cope with her environment she must restrict her activity and constrict her perceptual scope, her conceptual level and her range of experience. However, the married female expects in time to fit more comfortably into her role; she feels she will be stronger, more stable and more active.

3. Marital Status Differences in Self-Evaluation.

The major difference between married and single males occurred on scales indicating a masculinity-femininity dimension. Masculinity-femininity is used in the sense of aggressiveness vs. tenderness, and mainly refers to the gentle-rough, soft-hard, and tame-wild scales. While there is no difference between the groups in perception of self as masculine at the present, married males see themselves as having changed since high school in the direction of being a little less masculine, though they are satisfied with their present image of themselves. They expect to be somewhat less masculine in five years. That is, they will be a little more gentle, soft, and tame than they would like to be. Single males indicate that they have not changed at all since high school. They desire and expect to be much more aggressively masculine in the future than married males.

The single males seem to present a forceful image of themselves, where zest and masculinity are concerned. Their emphasis is on freedom, independence and personality expression; for the married males, the emphasis seems to be on a sense of vitality that is mingled with responsibility, control and interpersonal relatedness.

The perceptions of the two groups of their peers seem to be congruent with the differences in their perceptions of themselves. Married males see themselves as being more giving, mellow, flexible, deep, firm, full, settled, soft and tame than their male peers. In each of these areas, with the exception of being soft, they are closer to their own ideals than are their peers. Married males want to be a little harder, and they see their peers as better approximating this ideal.

Single males consider themselves deeper and tamer than their peers. They are more gentle than their peers, but would prefer to be somewhat less gentle. Peers are seen as being more responsive than they, and these single males would like to be as responsive as their peers.

B. Transition and Fantasy Life--The TAT

The Thematic Apperception Technique (TAT) is one of the most widely used personality assessment instruments available to the student of human behavior. It consists of presenting the subjects with a number of pictures and asking them to make up stories for each picture according to specified instructions.

The instructions for administration are simple. The subject is told to make up a story about the picture with a beginning, a middle, and an ending, and is asked to describe how he imagines the characters of the stories are feeling and what they are thinking. If the test is administered individually the respondent dictates his stories to the examiner and if it is administered to a group the subjects are instructed to write their stories. In the 1952 phase of this project the subjects wrote their stories to the pictures as they were projected on a screen. In the 1960 phase the TAT was administered to each subject by an interviewer.[1]

Several TAT sets have been devised, some for specific and others for more general purposes of personality assessment. The set most in use is the Revised Harvard Series developed by Henry Murray and his co-workers after many years of experimentation (17). The Harvard set consists of thirty cards some of which are recommended for use with all subjects regardless of their sex and age levels, and others for use with adult males, adult females, boys and girls.[2] The pictures used by the Young Adulthood Project--which will be described later--were all from the Revised Harvard Series.

Each TAT picture portrays a different situation and has what TAT experts call the "manifest" and "latent" demands. The former refers to "what's in the picture" and the latter to the emotional issue or issues raised by the situation portrayed in the card.

To satisfy the "manifest" demands the subject is expected to identify the major aspects of the stimulus and to relate them in some meaningful way. To satisfy the "latent" demand the individual is expected to apperceive an emotional issue (appropriate for the card) and to deal with it. The manifest and latent expectations are based on normative studies as well as on the psychologist's personal experiences with different groups of subjects.

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[1] Several experimental studies have been conducted to assess whether the different types of TAT administration (e.g., individual versus group forms) would result in different productivities, themes, needs, and the like. No appreciable differences have been detected except for one variable--the emotional tone of the stories.

[2] Although the Harvard Series can and has been used, for studying children, two TAT sets have specially been developed and standardized for children: the Michigan Picture Test and the Children's Apperception Test.

The TAT is a versatile instrument. The stories provide material from which the psychologist, regardless of his theoretical orientation, can draw inferences and make generalizations about the respondent without asking him any direct questions about himself, his problems, worries or attitudes. The technique lends itself for use with individuals as well as with groups of any culture (provided the cards portray culture-appropriate symbols), with males and females, children and adults, "normal" or "pathological" subjects. This versatility accounts for the fact that the TAT is now as popular with the social scientist, who is interested in group processes or variations, as it is with the clinical psychologist who is interested in the diagnosis, prognosis and assessment of the strengths and weaknesses of his patients.

The TAT belongs to the group of psychological tests frequently referred to as "projective" techniques. The use of the term "projective" in this context does not imply, as the psychoanalytic term "projection" does, that the individual attributes to others traits, attitudes, thoughts and feelings unacceptable to himself. In the field of projective techniques this psychoanalytic assumption is entertained as a possibility but not as a necessity; the response of the individual may but by no means necessarily does imply that the traits and motives attributed to the characters of the stories are unacceptable to the self or otherwise denied.

Students of the TAT do however make several assumptions. Among these are the assumptions that the stories which the individual makes up to the TAT cards are meaningful to the respondent, suggestive of some of his aspirations, strivings, goals, needs and apprehensions, and descriptive of his characteristic ways of dealing with reality and functioning in it. In essence, the rationale behind these assumptions is that fantasy, recall and perception--which provide the raw material for the stories--are subject to selective processes, and colored to a great extent by the emotional dynamics of the individual.

It is mainly because of these assumptions that the situations portrayed in the TAT cards should be diverse and somewhat ambiguous. The diversity of situations is required because it would give a relatively varied range of sampling of the individual's functioning and stimulates a variety of memories, reactions, and experiences. Only when the individual is exposed to diverse situations can we have confidence in the accuracy of the inferences and generalizations we make about the individual.

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Relative ambiguity of the manifest and latent aspects of the pictures is essential in order to allow the respondent maximal freedom to "let himself go" in making up his stories and in giving him the opportunity to "read into" the pictures whatever he "wants" to, thus revealing more of his individuality, idiosyncracies and personal feelings.

To illustrate this point, some of the subjects of this project interpreted the emotions of the young boy who is portrayed in card 1 of the TAT as contemplating a violin, as anger; others interpreted his emotion as disgust, sadness, happiness, elation, contentment, dejection, or fear. Assuming that the plot of the subject who saw the boy as happy is similar to the plot of the subject who saw him as dejected, we may infer that the two subjects have contradictory attitudes towards the issue raised in the plot.

To illustrate the importance of ambiguity with regard to the manifest stimulus the object lying on the ground by the person leaning on a couch in card 3BM, has been seen by some of the subjects as a gun, by others as a key, toy, scissors, bunch of keys, pen, telephone receiver, pocket book, or broken vase. Others did not apperceive the object at all or were unable to state what it was. Depending on the plot of the individual's story and on the card's manifest and latent demands, the inference one makes about the subject who sees the object as a loaded gun will be different from the inference one makes about the subject who sees it as a youngster's toy.

The task of analyzing and interpreting the TAT stories is much too complex and involved to be discussed in this brief introduction. The complexity stems largely from the fact that the analysis and interpretation of the TAT involve a wide range of problems including those of reliability, validity, levels of inference and the variety of theoretical frames of reference which different TAT experts have.

A number of less comprehensive methods of analysis of the TAT have been proposed. These are commonly designed for research dealing with one or more specific psychological dimensions--anxiety, hostility, intellectual functioning, mood tone, attitude toward pregnancy and so on. Generally the specific method of analysis chosen or devised is largely dictated by the question the investigator is asking.

The TAT was administered to our sample in groups when the subjects were in high school and individually when they were young adults. Three different methods of analyzing the TAT stories were applied to the stories given by our research group.

The first method sought to estimate some aspects of the ego functioning of the subjects and how these differ between:

a) males and females, b) single and married subjects, and c) adolescence and young adulthood. An index of ego sufficiency mentioned earlier (Chapter III) was selected to shed light on these differences. The second technique was designed to answer questions pertaining to adolescence and young adulthood, and between the sexes. The complexity scale was developed to cope with this problem. The third approach deals more with the content than with the form of the stories. It was used to obtain normative data on the general configuration of stories of the two age groups and to explore, without previous hypotheses, personality trends during this transitional stage and personality differences between sex and marital status groups.

1. Analysis of the TAT Based on Form Properties of Stories

The ego sufficiency scale, developed by Dana (31) deals with the individual's effectiveness in dealing with reality and mode of functioning. Five TAT cards were used in scoring for both males and females: 2, 3BM, 4, 6BM and 7BM. Two sub-scores were derived for each story. One, perceptual organization measures the degree to which the subject follows the instructions on the TAT, i.e., the ability to deal with the following elements: card description, past, present, future, reference to emotion, reference to thinking and outcome. The second, perceptual range, was concerned not with the ability to adhere to the instructions and to make up a complete story, but the ability to meet the demands, manifest and latent, of the particular card. On the basis of the normative studies available in the literature three elements or expectations were derived for each of the five cards.[1],[2]

A successful and efficient completion of the tasks presented by the TAT as reflected in high scores on the ego sufficiency scale, demands that the individual remember the instructions and search his memory and experience for the most appropriate words and images, adapt himself to and get involved in, the task at hand; it calls for accurate perception, the maintenance of objectivity when dealing with those stimuli and the organization of the narrative in a coherent, continuous and logical manner. The ego sufficiency scale can therefore be considered an index of the individual's ability to cope with these demands--which are presumed to be related to the demands of everyday life.

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[1] Inter-judge and intra-judge agreements in scoring were computed for each sub-score. The mean inter-judge agreement was 91.6 percent, while the mean intra-judge agreement was 96.6 percent.

[2] Computation of the subject's final ego sufficiency score involves transformation of the two sub-scores into z-score equivalents and then combining the two z-scores thus obtained.

The individual person interprets his social world through the structure of his construct system, or network of ideal and concepts through which he understands and orders his experience. A more elaborate and varied construct system allows for greater differentiation and more complex grasp of one's social surroundings. It is the differentiation of this construct system which is measured by the complexity scale.

Complexity is operationally defined in this study as the number of different concepts which the individual utilizes in describing six TAT characters: the young man in cards 4 and 6BM, the young woman in cards 2 and 4, the older man in card 7BM and the older woman in 6BM. Our interest lies in the number of concepts used by the subjects in describing these characters and not in the specific constructs used, or the frequency with which each was utilized.

Seventeen constructs were selected. The constructs include the following: achievement-recognition, affiliation-nurturance, competence, deliberation, flexibility, abasement, dominance, extragression, inadequacy-inferiority, rejection, acquisition-retention, anxiety, autonomy, exposition, heterosexuality, narcissism-exhibitionism and dependency. The criteria which guided the choice of these concepts were empirical determination in a pilot study, psychological meaningfulness and appropriateness for TAT material.

After a period of discussion and practice an independent scorer was given ten randomly selected protocols and asked to determine how many of the seventeen constructs each individual had used in depicting the six characters. The over-all agreement was 92.6 percent.

From several studies utilizing the concept of complexity, the conclusion was made that complexity is a personality attribute which is characterized by the individual's sensitivity to his social and physical surroundings and a flexible and non-constricted approach in dealing with the problems and freedom in expressing emotion.

The previous discussion of the facts and theories available in the fields of development psychology, social psychology and sociology led to the hypothesis that the male in this culture faces an easier transition to young adulthood than does the female. If this view is valid one would expect the strain on ego resources of the young woman from adolescence to young adulthood to become more intense, leading to a decline in the efficiency of ego functioning. For the young man the stresses which may arise in the course of his adjustment to his new roles are offset.

In line with this argument, the data were examined for changes between adolescence and adulthood for males and females.

The means, medians, ranges, and standard deviations of the scores for the sample while they were in high school, while they were young adults, and the difference between these scores were computed (Appendix 9, Tables 1, 2, 3).

The decline in the scores of the females is significant (.001) as was the rise in the scores of the males from adolescence to young adulthood (.10).

In adolescence the scores of the female subjects were significantly higher than those of the males, but their scores were significantly lower than those of males in young adulthood. The status of the two sexes was reversed from adolescence to young adulthood.

If it is true that young adult women are subjected to greater strain than men, they may tend to consolidate ego resources in order to cope with conflicts and the demands of essential tasks. If so, this may lead to a constriction and to a decreased sensitivity to internal stimulation and nuances. In contrast, the relative ease with which the males make the transition may be expected to lead to an expansion of their world, to an increased sensitivity and openness to experience and to greater involvement in social and physical surroundings.

These changes should be reflected in a significant decline in the complexity scores of the female subjects from adolescence to young adulthood and a significant increase in the complexity scores of the male subjects from adolescence to young adulthood. These possible trends were examined, using means, medians, ranges, and standard deviations of the high school, young adult scores, and the differences between scores at the two levels (Appendix 9, Table 3). As expected, the scores of females declined (.04) and the scores of males rose (.03). This result may mean that females become more constricted in young adulthood than they were in adolescence and that their sensitivity to things beyond the confines of themselves decreases. The reverse is true of males; there is significant rise in their involvement in and sensitivity to their external surroundings and a significant degree of ego expansion.

The above data and implications were derived from one kind of approach to fantasy material. A more holistic approach utilizing the content of TAT stories suggested different, but not necessarily inconsistent, conclusions.

2. Analysis of Thematic Content of TAT Stories.

Interpretation from the content of fantasy data, in general, requires a number of assumptions. The major assumption--that projective test behavior is determined by psychological characteristics of the subject--is compelling because it is essentially a statement of the fundamental position of psychic determinism. If one assumes that fantasy, as represented by TAT stories, taps psychological preoccupations and dimensions of personality, one can logically expect the basic plot of the fantasy--the manifest theme--to reflect some of the psychological concerns of the storyteller. This view guided the following approach to TAT data.

The manifest themes or theme categories were determined empirically for six pictures (1, 2, 3BM, 4, 6BM, 14) by grouping the TAT stories to a single picture according to basic similarities in the plot sequence. In general, the most inclusive theme categories describe the problematic situation facing the central figure. A second level of categorization reflects how the hero reacts to this situation or how he feels about it (or, in some instances, how someone else reacts to the hero), and the third level of categorization either describes the outcome or indicates that there is no resolution of the problem with which the hero is confronted. Table 40 lists the major theme used in this analysis.

TABLE 40

MAJOR RESPONSES CATEGORIES (TAT)

Category

Picture 1

Murray's description: A young boy is contemplating a violin which rests on a table in front of him. (Drawing by Christina D. Morgan.)

Response Categories:

I. Boy Faces Externally Imposed Task.
II. Boy Faces Internally Imposed Task.
III. Boy's Violin is Broken.
IV. Miscellaneous.

Picture 2

Murray's description: Country scene: in the foreground is a young woman with books in her hand; in the background a man is working in the fields and an older woman is looking on. (Mural by Leon Kroll, reproduced by special permission of the U.S. Department of Justice.)

TABLE 40--Continued

Response categories:

- I. Girl is the central figure, a member of the group.
- II. Girl is central or important figure in heterosexual relationship or fantasy.
- III. Girl is central figure, set apart from the group.
- IV. Family as a group or as separate individuals are working toward one or more goals.
- V. No central figure or plot.
- VI. Miscellaneous.

Picture 3BM

Murray's description: On the floor against a couch is the huddled form of a boy with his head bowed on his right arm. Beside him on the floor is a revolver. (Drawing by Christina D. Morgan.)

Response categories:

- I. Hero in conflict with authority (Guilt-punishment).
- II. Hero has lost or been separated from loved one or object.
- III. Hero has unhappy interpersonal relationship (rejection).
- IV. Hero is unhappy for unspecified reason.
- V. Hero is sleeping, resting, dreaming (no problem).
- VI. Miscellaneous.

Picture 4

Murray's description: A woman is clutching the shoulders of a man, whose face and body are averted as if he were trying to pull away from her. (Illustration by C. C. Beall, reproduced by special permission of Collier's, copyright 1940, by the Crowell-Collier Publishing Company.)

Response categories:

- I. Man is unfaithful, attracted to two women, wants to leave one woman for another.

TABLE 40--Continued

II. Man has committed or about to commit aggressive, anti-social, impulsive act (from woman's viewpoint).
III. Woman's actions suspected, questioned, considered undesirable by man, story-teller, other.
IV. Man is upset, disabled, feels inadequate.
V. Man and woman disagree, have interpersonal difficulties.
VI. Miscellaneous.

Picture 6BM

Murray's description: A short elderly woman stands with her back turned to a tall young man. The latter is looking downward with a perplexed expression. (Drawing by Christina D. Morgan.)

Response categories:

I. Young man wants to marry.
II. Young man about to leave home, make decision (about career, army, non-specific).
III. Young man is in trouble, has problem, or has hurt older woman.
IV. Older woman or both have received or await bad news (fear of or loss of loved one).
V. Miscellaneous.

Picture 14

Murray's description: The silhouette of a man (or woman) against a bright window. The rest of the picture is totally black. (Drawing by Christina D. Morgan.)

Response categories:

I. Hero is primarily engaged in constructive or affectively positive thoughts or day dreams and/or seeks or receives stimulation or sensory gratification from the physical environment.
II. Hero is observing the physical environment and/or is engaged in routine activity, without positive thoughts or feelings (largely descriptive of stimulus elements).

TABLE 40--Continued

III. Hero has lost or fears loss of loved one.
IV. Hero has been punished, deprived, restricted, dominated by parents, other.
V. Hero commits aggressive or asocial act.
VI. Hero is or feels inadequate, handicapped, and/or lonely (a social failure) or has unspecified problem.
VII. Miscellaneous.

Most of the results presented here are based upon the most inclusive or primary level of categorization, because the number of subjects in the final follow-up study was not large enough to make statistically meaningful comparisons at the second and third levels of categorization. There was 92 percent agreement between the judges on the overall categorization of the six pictures with little variation from picture to picture.

Although the fantasy might be compared in a variety of ways, we will here deal primarily with the modal theme. The pattern of response by theme categories, for both adolescent and young adult testings, is shown in Appendix 9.

Sex differences of statistical significance did not occur in the theme frequencies for most pictures at adolescence; however, sex differences did occur in the frequencies of the themes elicited by Picture 6BM (Appendix 9, Table 9). The emphasis on the psychological issues of separation, independence, and assertiveness vs. compliance, submission, and passivity emerge in a modal description of the female responses, although these issues are not central in all female responses. The maternal figure in many of these fantasies exists as a potential and sometimes real threat to the young man's making and carrying out of independent decisions, since the hero at least momentarily, cannot ignore the consequences of his action upon the feelings etc., of the older woman. From one vantage point, then, the problem arises out of a possible clash of interests of the maternal figure and the hero.

Many males also gave this type response; however, more common among the adolescent male responses are those in which the young man's competence, adequacy or general worthiness are questioned. In these fantasies the maternal figure emerges, not as a potential threat, but as a possible source of support or nurturance to the young man. (It may or may not be relevant that she only infrequently fulfills this role.) The problematic situation arises from circumstances outside of the interpersonal relationship of the man and the maternal figure, and typically, from flaws in the character of the male.

Without generalizing to an overt level of behavior, it is clear that in the fantasy of adolescent females there emerges a greater sensitivity to and preoccupation with maternal feelings and expectations than appears in the fantasy of adolescent males. Because of this sensitivity and preoccupation, perhaps, females more often view the maternal figure as non-facilitating in the attainment of personal goals and independent decisions; whereas adolescent males are more apt to see the maternal figure as a possible source of support--even in the face of irresponsibility and generally undesirable behavior. By inference, this difference suggests that the adolescent female's attachment to the mother often differs from that of the adolescent male.

Although both sexes gave about an equal number of themes in which the "boy" in picture 3BM was seen as having committed some transgression (of varying seriousness) or as having suffered a personal loss, females, more often than males, saw the hero (often seen as an adolescent) as having been rejected by parents, peer, etc.

Again, the fantasy of the adolescent female, as contrasted to the adolescent male, is more often focused on a problem that arises within a close inter-personal relationship. In addition, the negative behavior of the significant other person is not justified by undesirable behavior on the part of the hero. This is in contrast to stories where the hero is seen most often as receiving punishment justly deserved.

The responses to the remaining four pictures show no statistically significant sex differences, but the trends suggested by the data are consistent with those described above. For example, adolescent females, more often than males, tend to see the boy in Picture 1 as being externally pressured (into practising the violin) and less often facing a task which he has set for himself. In their responses to Picture 14, females somewhat more frequently than males see the young man as being dominated by an external agent--typically by one or both parental figures. These differences also suggest a greater preoccupation on the part of females with authority relationships and perhaps interpersonal relationships in general.

Although there are undoubtedly other sex differences in adolescent fantasy, the greater preoccupation of females with externally imposed demands, influences and obstacles (particularly within authority relationships) and their implicit psychological issues and the somewhat greater concern of males with internal needs and pressures seem to be the most salient dimensions revealed by a comparison of those manifest themes which are not equally popular with the sexes.

When the TAT themes of the young adults are compared to the adolescent themes, it is apparent that, although the frequencies of the various themes have changed, the theme categories derived from adolescent responses proved adequate for the responses of young adults. In addition, the modal responses changed in only one instance for the females (Picture 4) and in only two instances for males (Picture 4 and 6 BM). The major implication of these empirical facts would seem to be that the preoccupations of this group of subjects as a whole, as revealed in the manifest themes of their fantasy, has not changed drastically during this period, although the responses of individual subjects may have changed.

A look at the theme frequencies for Picture 6BM indicates that for males a decrease in themes pertaining to inadequacy and an increase in mutual loss themes occurred over time. (The same trend occurred for females, but it did not change the modal feminine responses.) The "loss" central to these fantasties typically results from uncontrollable circumstances--or at least circumstances beyond the control of either the young men or older woman. This is in rather striking contrast to the modal adolescent response in which the young man is to blame--at least in part--for the situation. In addition, the young man in these stories no longer expects or hopes for nurturance or support, although in some stories a kind of mutual dependence or support at a time of crisis is evident. More typically, he is fulfilling a duty with understanding and sympathy. In more general terms, this shift in modal response suggests some change in the male attitude toward the maternal figure and in the male preoccupation with adequacy.

Another shift in modal responses occurred for Picture 4. When contrasted to the adolescent stories, young adult responses to this picture suggest that some sex role attitudes change. However, others may be relatively stable by adolescence: the female in this picture is typically seen as trying to persuade or influence the male to behave in a less impulsive, less aggressive, and generally a more socially acceptable way.

At adolescence the heterosexual relationship described by both sexes, though somewhat more frequently by boys, is unstable because of the male's infidelity (often combined with violent aggression--e.g., murder, suicide, etc.). At adulthood, both sexes see the male only infrequently as being involved in extra-marital affairs. The problematic situation, as seen by the young adults, most frequently arises from disagreements within the relationship or from the arousal of the man's anger or aggressiveness by someone other than the woman pictured. The first is a more popular female response and the latter is a more popular male response. However, these sex differences are not statistically significant.

Frequencies of themes for the remaining pictures indicate that the most popular responses at adolescence are also the most popular at adulthood. However, when the themes for all the pictures are treated as a unit, some consistent shifts in the frequency of certain types of stories occur. Most obvious, perhaps, is a decrease in themes in which the "unfortunate" things happening to the hero--loss, rejection, deprivation, domination--are beyond his control. The most notable exception is the increase in themes in which a mutual loss is suffered by the hero and the older woman in Picture 6BM.

In contrast, there is an increase in themes in which the hero is not the victim of his environment, in which the problematic situation--if there is one--arises from the hero's "tragic flaws" (which he does not deny) and not from the unjustified negative behavior of another or an uncontrollable environment in general. Implicit in these stories is a sense of responsibility felt by the hero for his own actions (and, in some cases, an increasing sense of guilt or uneasiness as to the outcome) and/or the desire to master the internal or external obstacles which may be confronted in the effort to attain goals.

If these two shifts can be attributed to underlying psychological variables, it seems likely that for the subjects in this study there has been an increase in feelings of autonomy and control (not in the sense of confidence that one can accomplish what one desires as much as the psychological feeling that one can and must try).

Along another dimension--that of family relationships--suggestive is the decrease in themes in which the hero is seen as being deprived, rejected, etc., by parents, in which the areas of family interaction are strongly defended against, and in which the maternal figure (or maternal control) arouses intense hostility, rebellion, antisocial, or aggressive behavior. In a sense, this is part of the first trend noted: a decreasing tendency to project blame for one's unhappiness and problems to others in the environment.

On still another dimension, trends appear with respect to heterosexual concerns. Among these is a decrease in stories in which the heterosexual interests are introduced, an increase in family-centered themes and changes within heterosexual relationships. As a whole these changes in theme frequencies suggest less preoccupation with establishing a heterosexual relationship and greater concern with maintaining one.

The most salient fact revealed by a comparison of the frequencies of themes for both sexes at adolescence and young adulthood is that changes in theme frequencies over time are roughly equivalent for the sexes: themes which increase for males also increase for females, etc. Thus, the sex similarities, as well as the differences, which occur in adolescent fantasy are also apparent in adult fantasy.

Some of the differences appear to have been accentuated, however, in the intervening years, for a few that were not statistically significant at adolescence are significant at adulthood.

At adulthood, as at adolescence, Picture 6BM reveals the greatest sex differences. Females, more often than males, still give responses in which the psychological issues of independence and separation are raised, whereas males, though less frequently than at adolescence, give themes in which the male's adequacy and worthiness seem to be central.

This change may largely reflect increasing sex role differentiation. Among females there is an increase in responses of an introspective, spiritual, emotional type which are uncommon among adult males. In contrast, there is an increase in male responses in which the picture but not the hero's thoughts and feelings is described and stories in which more specific, concrete and practical concerns are uppermost in the hero's thoughts.

On an interpretive level the data for all six pictures suggest that males and females have changed in a similar direction on most psychological dimensions tapped by the fantasy themes. Both sexes respond at adulthood, for example, with more themes in which the hero assumes greater responsibility for his actions and fewer themes in which he is at the mercy of fate.

However, the frequencies of some themes suggest that adult females continue to view interpersonal and particularly authority relationships differently from males. Specifically, maternal figures are more often seen as dominating, controlling, manipulating, etc., and opposite sex relationships are more often seen as problematic within the relationship itself. In these responses the personal environment is often viewed as non-facilitating in the attainment of goals or the gratification of impulses. One might guess that most of the females in this study view their own problems and difficulties as arising within close interpersonal relationships, in the conflict between their own needs and those of others (i.e., the need to conform and the need for autonomy).

In contrast, the themes of males suggest somewhat more generalized feelings of trust within close interpersonal relationships (particularly to the maternal figure) and less sensitivity to and about interpersonal conflicts and external pressures within these relationships. On the other hand, males appear to be more preoccupied with competence or adequacy in achieving desired goals and handling inner impulses.

Whatever their major concerns, however, many of these subjects of both sexes appear to be forward looking and optimistic, although more females may be so inclined.

One implication of these data would seem to be that the major psychological difference between the sexes--tapped by the manifest theme--exist at adolescence and persist into young adulthood. The effect of the intervening years on the manifest themes of both sexes appears to be relatively similar with some suggestion that the sex differences have become somewhat more accentuated over time.

CHAPTER VII

ABSTRACT

In American society the late teens and early twenties span a period of critical psycho-social career development in the life of the typical young person. In a sense the post-high school years give the adolescent his first opportunity to make his own decisions in major life areas. Until this time he has undergone a long period of more or less compulsory socialization in two of the central institutions of the society--the family and the public school. In this transition period the structuring of his behavior is less compelling, and he is in a position to exercise some impact upon the events and situations which will eventually determine the nature and direction of his career.

The fluid and formative character of adolescence has been described by many writers, but there is little theory or information about the processes which bring to an end the diffuse features of this stage of development. There has been a tendency to see adolescence as a period of preparation and rehearsal for adult roles and an implicit assumption that such experimentation *per se* is a good thing which will accrue positive carry-over to adult behavior. The reinforcing impact of the peer group has been given particularly high value; the advantages of intensive and extensive social experience with peers of both sexes has seldom been questioned.

Late adolescence, however, is a time for transition from one age grade to another in our society and there is a need for more thorough study of the steps by which this transition is completed. This is especially important in view of the fact that the society does not establish a formal, well-defined set of experiences which lead the pre-adult into the roles and behavior he will be called upon to demonstrate as an equal member of the adult community. An equally important problem is the extent of the influence of adolescent and childhood experience upon the ease with which the transition to adulthood can be accomplished and upon adult achievement and behavior. The question we posed in our research was this: do the relative experience and success of teen-agers in either the academic or social areas during high school hold a systematic relationship to subsequent performance as young adults?

This report deals with the time of transition from the viewpoint of educational and developmental psychology. It is based upon a follow-up study of a high school senior class and is concerned with analysis of data gathered at two points in time, rather than a sequence of longitudinal data. It involves three major dimensions of behavior: achievement in work, integration into the social aspects of the community, and the development of internal areas of experience--self-evaluation, satisfaction with accomplishments, and identity. The emphasis in this report will center upon the achievement-success variables of the project and upon the relationships between school performance and later performance measures.

A. Design of the Project.

This project began in 1952 with a study of 351 metropolitan high school seniors. The high school was located in a stable community and drew from both white-collar and working-class families. There were few professional families in the district and almost no students from slum areas.

The design of the project rests upon the analysis of relationships between behavior observed or reported in two points in time: the high school senior year when the subjects were approximately 17 or 18 years of age, and eight years later when the members of the class were in their mid-twenties. Several obvious advantages would have accrued from access to data at some point between these two ages, but data were not available to us on a systematic basis.

B. The High School Study: Definition of Variables.

The information gathered in the high school phase, and the measures derived from the original data sources may be grouped into three broad areas of behavior.

1. Measures of academic talent and achievement.

a. A composite measure of scholastic ability, based upon administrations of two standard group intelligence tests.

b. Grade point average, based upon performance in academic subjects during the junior and senior years in high school.

c. Rank in class, based upon the school's records of performance in all subjects over the four-year high school period.

d. Disparity score, derived from a comparison of the subject's relative standing on the composite measure of scholastic ability and grade point average.

2. Measures of social facility and participation.

Information gathered in this area was intended to afford an estimate of the degree of participation, rather than the nature of interpersonal relationships. The measures used were:

a. Membership in formally-approved clubs and organizations within the context of the high school's official activities.

b. Membership in informal social clubs at school not recognized or approved by the school administration. These clubs were organized in the sense that they elected officers, held regular meetings, were known to the student body, and followed a set of regulations developed by the members.

c. Mutual choice friends in the senior class. Social activities were indicated by responses to a questionnaire which included sociometric-type items.

d. Membership in formal organizations outside of high school. This measure indicated the number of adult-sponsored (church youth groups, YMCA, etc.) associations in which the subject held membership.

e. Membership in informal groups and clubs outside of school. The distinction between participation in cliques and membership in informal clubs was sometimes difficult to make. The criteria adopted were that an informal club was one with administrative structure (president, etc.), that held regular meetings, had a name, and was not sponsored or supervised by an adult or adult organization.

f. Teachers' ratings on social ability of the high school class. The ratings indicated the teacher's opinion of the social adeptness and success of the student. Teachers' ratings were averaged for each subject to obtain a perceived sociability score.

g. Popularity votes by peers. The questionnaire administered to the high school class asked each senior to list the names of his classmates who were "the most outstanding" members of the class.

3. Information on attitudes and other internal states.

Our initial testing schedule included a group-administered Murray Thematic Apperception Test, an Incomplete Sentences Test, and a number of questions which probed the student's motivation for post-high school achievement and his feelings about his high school experience.

In addition to the data included in these major categories, information was obtained from the sample on a number of variables dealing with family background and with parental attitudes toward future education and career choice.

The Follow-Up Study

The follow-up study was planned as a basis for examining the high school antecedents of adult performance. The central thrust of the adult phase of the project was the attempt to discover and understand the social, emotional, and psychological factors in adolescents of high-school age which indicated the likelihood of later achievement or failure by these persons in adult roles and responsibilities.

With this broad objective in mind we decided to contact as many of the original class as possible. However, the total amount of data to be obtained from each subject was so great that a decision was made to obtain certain minimal information from the majority of the class and extensive information from a small proportion of the class. This proportion was selected to represent the total senior class in several important respects.

One of the central problems in designing the instruments of the follow-up study was the attempt to obtain data in areas of behavior comparable to behavior measured in the initial study. It was decided that information should be gathered in the three broad areas already indicated--work-achievement, social, and psychological--even though the instrument and questions used would not be identical. The character of the follow-up study was, by necessity, based on individual interview contacts. While some of our data were obtained by mailed questionnaires, the larger part of the data on which this report is based was elicited in face-to-face interview situations, a methodological consideration that should be kept in mind in evaluating the results.

C. The Follow-Up Study: Definition of Variables.

On the basis of staff conferences and preliminary interviewing, a guided questionnaire was prepared to include multiple-choice as well as open-end questions. In addition to the interview, the data-gathering session included administration of a semantic differential and a TAT. The types of information obtained from each subject of the intensive sample may be summarized in categories roughly comparable to those of the earlier phase of the project.

1. Measures of Work Achievement and Social Prestige.

The information gathered in this area of behavior was intended to reflect accomplishments in the area of success as defined in the society--the acquisition of prestige in the community and the development of earning power. The specific measures involved were: level of occupation, defined in terms of a scale of occupational prestige based upon the categories used by Warner and modified for use in a metropolitan region by McCall; income; social mobility, defined as social status of subject relative to social status of father when the subject was in high school.

2. Measures of Social Participation and Involvement in the Community.

These measures attempted to assess both informal and formal social activity on these specific points: membership in formal institutions of the community (i.e., church, lodge, civic, and other service organizations); membership in informal social clubs (i.e., organizations of primarily social nature, including sports); range and number of informal social activities; frequency and type of interaction with friends; and interaction with family or origin.

3. Measures of Psychosocial Responses and Adaptation to Young Adulthood.

Our techniques for gathering data relating to internal states ranged from projective devices to direct questions asking for self-evaluation and satisfaction with achievement. In addition each subject was rated by the interviewer on several scales. The methods used were: self-report, each subject rating himself on satisfaction with his achievement in three areas--work, social activities, and family; evaluation of self-concept based upon semantic differential rating scales; projective material elicited by the Thematic Apperception Technique; and interview ratings. Based upon the interview with each subject, the interviewer rated the respondent on a scale that indicated the extent to which the subject had completed the transition from adolescence to young adulthood.

The central purpose of the rating was to indicate the degree to which the individual under consideration had assumed the responsibilities of adult life in this society. Three formal criteria were selected as most nearly representing the basic and minimal expectations of adults in this country: an occupation, as represented by a steady job or career (including housewife); marriage as a representation of sexual identity; and residence apart from parent's home as representing responsibility for one's own way of life and readiness to establish a family. The interviewer exercised judgment in applying these criteria so that an unmarried person who had clearly taken on adult roles and responsibilities was not necessarily rated lower than maximum. A school teacher, for example, who was pursuing a professional career might receive a rating as high as a woman who had taken on the roles of wife and mother.

D. Method of Analysis

The relationships between high school achievement and young adult performance were examined by several procedures. The results of this analysis are presented in a report now in preparation for the Cooperative Research Bureau of the Office of Education. The most general summary of the findings relevant to the topic of this paper is, first, that there is a great deal of variability and change between the adolescent and young adult patterns of behavior; and second, the area showing greatest consistency and predictive power was scholastic performance in high school.

Because of the prominence of high school scholastic achievement as an indication of later success, this report will be confined to the analysis of four criterion groups based upon achievement during high school and young adulthood. High and low achievement in high school was defined on the basis of grades, taking the upper and lower 30 percent as the cut-off points. High achievement in young adulthood was defined by any one of three criteria: level of occupation, social mobility of at least one social class step, and salary. Low achievement was defined by level of occupation, downward mobility, and salary. No individual qualified for the high group if he were low in any one of the three criteria; no individual qualified for the low group if he were high in any one of the three criteria.

Combining criteria at both high school and young adult levels resulted in the following achievement groups:

High-high Group: subjects who were relatively high academic achievers in high school and who were in relatively high occupational levels or were socially mobile eight years later

High-low Group: subjects who were high achievers in high school but low in occupational achievement

Low-high Group: subjects who were low achievers in high school and high in occupational achievement

Low-low Group: subjects who were low in achievement at both points in time

Of the original 351 subjects, 51 males and 69 females fell into one or another of these four groups. The four groups were aligned in several ways for purpose of comparison on each variable to be considered. For example, those who were high in school performance were compared with those who were low, irrespective of young adult performance; those high in young adult performance were compared with those low in young adult performance, irrespective of high school performance; those high in young adulthood but low in high school performance were compared with those high in both, and so forth. All possible comparisons were made in which differences in the variables under consideration could have been attributed to either high school or young adult performance.

E. Results.

Using achievement as the dependent variable, we will present data bearing on the relationship between patterns of achieving behavior and other areas of performance at the high school and young adult periods. While this strategy focuses upon a fairly specific type of performance and is thus somewhat limited in scope, it also provides a method for a gross examination of the consistency of behavior in several other sectors.

1. Relationship of Achievement Grouping to Adolescent Behavior.

a. Scholastic ability and performance.

As indicated above, the absolute level of high school grades was the most potent indicator of later success, particularly for males. This pattern raised a question about the extent to which such achievement, at both high school and adult levels, is a function of mental ability, as measured by tests, and how much it is a consequence of industry. In our data the relationship between intelligence and grades was significant at typical levels (r = .56) and so differences of ability among the four achievement groupings were apparent. However, intelligence did not distinguish among the post-high school achievement groups to the same degree. In part, this change was accounted for by the relative achievement of females (as measured by husband's occupation in the follow-up stage) which tended to decline more than did that of males.

A similar pattern was found for the tendency to over- or under-achieve (disparity scores) as measured by the discrepancy between grades and IQ. High school performance in all groupings was related to disparity scores, but these scores were not predictive of occupational success.

As was expected, the amount of post-high school education differed greatly among the groups. Those who did well scholastically in high school more often went on to college and went farther in higher education than did low school achievers.

b. Social class background, social skills, and activities.

The typical relationship between social class background and social achievement did not appear in our data, possibly because of the relatively homogeneous nature of this senior class and because of the self-selective motivational factors which kept those young people in high school while many of their peers from unskilled and semi-skilled occupational levels had already dropped out. At any rate, neither the ISC nor occupational level of the students' fathers differentiated among any of the four groups in any combination.

Social participation seems to have slight association with both high school performance and success in young adulthood. The high-high group was consistently high on all social variables (with one exception) and the low-lows were low. Although the difference between groups on any given measure was relatively small, it is significant that all the differences were in the same direction; i.e., the high-highs were more socially active than the low-lows, with the high-lows being intermediate in most cases.

While the differences in social behavior between the extreme achievement groups may be considered significant, that is, not merely random fluctuation, the relationship between high school social skills and young adult performance was not great. A study of the 20 socially most popular and prominent members of the senior class showed that this group did not maintain a relative advantage or success in either social or other areas of young adult performance when compared with a matched group of socially non-prominent peers.

c. Personality and family data.

Although the subjects' level of occupational aspiration (as reported in the high school phase of the study) was associated with academic success, such aspiration held no relation to actual occupational success later. Similarly, those whose parents held high occupational aspirations for them did well in high school but did not necessarily show occupational achievement as adults. Neither fathers' nor mothers' attitudes toward college attendance of our subjects or actual level of parental education bore any relationship to the subject's success either in high school or after.

From the Thematic Apperception Test given the subjects, a measure (ego functioning) was designed to indicate the individual's ability to perceive reality accurately, to recognize the salient features of his environment, and to organize and integrate experience meaningfully. Another measure (ego complexity) evaluated the subjects' sensitivity to external events and surroundings, to ego expansion (as opposed to constriction) rather than the more integrative aspects of ego functioning.

These measures, which have been shown to distinguish well-adjusted from poorly-adjusted groups in a clinical situation, are only slightly associated with academic behavior in high school or achievement in young adulthood. There is a significant association between "ego functioning" in high school, as measured by this technique, and the TAT, but this trend is reversed at the later period. Indeed, there was very little relationship for individual subjects between these psychological indicators at adolescence and scores eight years later. The most significant pattern in these indices was the tendency for the scores of males to be higher at young adulthood than at adolescence and the scores of females to be somewhat lower.

2. Relationship of Achievement Groupings to Young Adult Performance.

Since the selection of the groups was based upon occupational level at the follow-up stage and upon social mobility as indicated by the attainment of an occupational level higher than that of the father, the analysis of performance at the follow-up stage is restricted to social variables and measures of personality.

a. Achievement groupings and integration into the social life of the community.

In the area of sociability and social activities, no association was found between the achievement groupings and popularity, as measured by the number of friends the subject claimed to have. However, those who performed relatively well as young adults more frequently held memberships in formal associations. Reports of informal associations showed no such relation.

Another measure of informal sociability was obtained by inquiring about the number of social activities engaged in per week. This variable was used to measure current activities, whereas the prior indices attempted to gauge membership in organizations without evaluating frequency of activity in these organizations. However, frequency of social activities showed no significant associations with achievement. Also, total number of intrafamilial social activities per week and a composite of family and non-family interaction showed no significant differences among the achievement groups.

A summary of the level of social activities of the several achievement groupings was analyzed. Again, the differences between the groups do not generally attain statistical significance, but the pattern of difference is relatively consistent over the several measures.

b. Achievement groupings and personality measures.

The measures that we obtained on the nature of internal status of satisfaction, self-concept, and ego functioning as estimated from the TAT response did not show high association with achievement at the adult level. Ego functioning and ego complexity, as discussed earlier, were derived from a second administration of the TAT. Neither of these showed any relation to the achievement groups.

Another measure dealt with an assessment of psychosocial growth. The interviewers rated each subject on "role acceptance," a rating designed to reflect the extent to which the subject had made the transition from adolescence to adulthood. The basis for this rating was an assessment of the individual's willingness to assume the responsibilities of adulthood. When compared on this measure of psychosocial transition, those subjects who performed well in school were rated relatively higher as young adults than those who did not do well in high school. In addition, subjects who achieved, by our criteria, in young adulthood were also rated higher on this measure. The effect of post-high school experience is indicated by the fact that of our two groups who did poorly in high school, those who achieved in young adulthood were rated higher on this area of psychosocial achievement.

F. Summary and Implications of the Findings.

Our data bear upon theories of psychosocial development in several ways. While this report has centered upon results obtained from comparison of extreme categories comprisong only one-third of the total class, there is sufficient consistency in the findings to justify several general conclusions about the relevance of high school experience for the young adult performance of our group. The utilization of extreme groups probably over-estimates the trends that appear. Because of this problem in the use of high and low achievement groupings as a basis for generalizations, this summary treats the data presented here in light of other data available on the entire group which has not yet been reported.

The trend that is most clearly supported by our data is that academic achievement in high school is significantly associated with work-related variables in young adulthood. This pattern applies both to occupational level and the tendency to be socially mobile, i.e., to attain a higher social status than one's father. Achievement in the work arena is not simply a matter of intellect; indeed, grade average shows a higher association with occupation than do mental test scores. The predictive power of school academic achievement is particularly evident for males; for females the relationship is not so strong. This is an interesting finding in view of the fact that in our group, as in many others, girls tend to get higher grades than boys and to over-achieve more than do males. Thus, high school grades, which are generally not highly valued by males, are apparently very important for later successes but are not so indicative of success for girls, who value grades and exert more effort than boys to achieve in the classroom. That is, the high school seems to be a more compatible climate for females than for males but its effect upon later success is to the advantage of boys.

In contrast to the apparent impact of academic achievement is the low relationship that exists between social experience and skill in high school and work achievement in young adulthood. Also, on the basis of data from the total group, there seems to be little tendency for adolescents who were socially adept and active in high school to be unusually socially active as young adults. Nor is there an appreciable gain from high school social participation behaviors estimated by ratings of role acceptance or by the several measures of psychological behavior.

This lack of measurable benefit from social experience is of particular interest in view of the emphasis placed upon social interaction and popularity by adolescents, parents, and the schools. The close study of the socially-prominent high school seniors confirmed the trends apparent in other parts of the data. While it is recognized that we are not dealing with extremes of social ineptness or social isolation, it nonetheless appears that the impact of an active social schedule in high school does not necessarily result in long term gains. Some of the high school wall-flowers are now leading very active social lives, and some of the sociometric queens of the prom now have little social interaction outside their immediate family.

The ease of the transition from adolescence to young adulthood and the degree to which this has been accomplished by the middle twenties is apparently not greatly affected by high school social experience and only slightly associated with academic achievement. The rating on role acceptance does distinguish between the achievement groupings at the young adult level because of the overlapping of the ratings and achievement. However, the correlation between high school grades and the young adult ratings for the entire interview sample was slightly positive for girls, slightly negative for boys with a combined correlation of .01. There seems to be only slight reason to regard success in social and academic areas of high school experience as particularly helpful in preparing adolescents for the transition to young adulthood. The variety of experience after graduation and the sequence of events which follow upon graduation seem to be more influential in the nature of the transition process.

It seems likely that adult performance is more closely related to events and experiences that occur after high school than to high school behavior, especially to experiences in the family, the social class context and, later, in occupational situations. This is especially true of occupational commitment and other identity measures. Occupational commitment, for example, is related to occupational level, to salary, to social activities, and, of course, to expressed satisfaction with work. It is not significantly related to any high school variable. The interviews given us by our group illustrate vividly the importance of post-high school events. There seems to be a moratorium during high school, a waiting for things to happen that is abruptly broken by graduation. Although the experiences that break the relatively stable high school pattern are extremely varied and may be difficult to study systematically, they appear to be exceedingly influential upon later experiences and achievement.

These trends in our data indicate the fluid and unstable nature of adolescent behavior patterns. They suggest that the processes of identity that make for stable adult behavior and personality continue well past high school. The tendency of our results points toward late adolescence and the early twenties as perhaps a more critical period of development than is adolescence. They emphasize the need for concentrated research and theoretical attention to the transition between pre-adult and adult stages of development and the effects of this stage upon subsequent performance.

APPENDIX I

Comparison of Follow-Up Groups With Total High School Senior Class on Selected Characteristics

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TABLE 1

Total High School Class and Follow-Up Samples by Social Status of Father

Social Status*	Total Class		Interview Sample		Mail Contacts		Total Follow-Up	
	N	%	N	%	N	%	N	%
				Males				
Middle middle+ (ISC 22-37). .	22	12.4	11	14.5	01	02.8	12	10.7
Lower middle (ISC 38-51). .	68	38.2	33	43.4	10	27.8	43	38.4
Upper working class (ISC 52-66). .	76	42.7	32	42.1	23	63.9	55	49.1
No information	12	06.7	00	00	02	05.6	02	01.8
Total . . .	178	99.8	76	100	36	100.1	112	100
				Females				
Middle middle (ISC 22-37). .	17	09.8	11	11.7	02	05.1	13	09.8
Lower middle (ISC 38-51). .	61	35.3	34	36.2	14	35.9	48	36.0
Upper working class (ISC 52-66) .	83	48.0	48	51	19	48.7	67	50.3
No information	12	07.0	01	01	04	10.3	05	03.8
Total . . .	173	100.1	94	99.9	39	100.0	133	99.9

*The Index of Status Characteristics (ISC) used for this study was taken from procedures developed by Bevode C. McCall and available in a research memorandum dated February 15, 1956, entitled "Operational and Methodological Considerations in the Application of the Index of Status Characteristics to the Large Urban Community." The memorandum was written as Report Number 3 on The Chicago Tribune Sample Census, a larger study carried on by the Research Division of the Chicago Tribune.

The Index as used by McCall is a "technique for converting the subjective evaluations of informants into a consistent index of status which will provide a measure for statistical studies of large populations." A number of studies have been made of status characteristics in several communities of varying size since the writing of Social Class in America by W. Lloyd Warner and his associates in 1949. The memorandum by McCall discusses one way in which the study of status characteristics in a large urban community can be carried on.

The three items used to predict social class position in the Chicago Metropolitan Region for the Young Adult Study were: occupational level, source of income, and educational level. (Educational level was used as the third item in the Index rather than the preferred, more powerful item of house type, since the 1952 appraisals of subjects' parents' houses were lacking in the detail recommended by McCall.) Each of these three items were rated for each individual on a seven-point scale using the rating guides presented by McCall:

Status Levels of Occupations

Status Level	Occupational Types
1.	Major responsibility for business policy of large firms, professions protected by license, or degree requirements both formal and informal, especially the upper echelons of these professions.
2.	Major responsibility for business policy, small firms; some responsibility for business policy in large firms; professions protected by license or degree requirements--especially the average types of the professions.
3.	Minor responsibility for business policy; supervision of white collar workers; professions with advanced degrees, no protection; variants of the major licensed professions, or practitioners without the usual educational training.
4.	Supervision of manual workers; skilled white collar workers.
5.	Skilled trades, and manual workers (usually used only for employed workers); semi-skilled white collar jobs; semi-professionalized service workers.
6.	Semi-skilled workers.
7.	Heavy labor; domestic servants.

(continued)

Status Equivalents of Source of Income

Status Rating	Source of Income
1.	Inherited wealth (trust funds, etc.)
2.	Earned wealth (savings and investments)
3.	Profits and fees (from business or practice of professions)
4.	Salary (from job) or commissions (from males)
5.	Wages (from job, or piece work)
6.	Income from private relief (from relatives or friends)
7.	Income from public charity (from public or private agencies)

Status Equivalents of Education

Status Rating	Education Level	Years of Schooling
1.	Completed appropriate graduate work for recognized profession, or graduated from a generally recognized four-year school of high status	17 plus
2.	Graduated from a four-year college, university, or professional school, with a recognized degree; or some work on advanced degree, but not finished. (May have completed advanced degree in Teacher's College; also, some work on advanced degree, but not finished.)	16
3.	Attended college for two or more years, but did not receive a recognized degree; or equivalent education such as that for a registered nurse	14-15
4.	Graduated from high school or completed equivalent secondary education, including post high school "trade school" or "business school" education. Also one year of college	12-13
5.	Attended high school, but did not graduate	9-11
6.	Attended grade school, four to eight years	4-8
7.	None, to three years, of schooling	0-3

(continued)

These status scores were weighted by multiplying the Occupational score by five, the Source of Income score by four and the Education score by three.

Social class equivalents of these scores:+

12-21	Upper Class
22-37	Upper Middle Class
38-51	Lower Middle Class
52-66	Upper Lower Class
67-84	Lower Lower Class

Using the system outlined above, ISC's were derived for the subjects' parents in 1952 and the subjects themselves in 1960. The married females in our sample were given their ISC scores by rating their husbands on the appropriate items. In those very few cases where education was unavailable, a house type rating was used.

+Although these ISC scores usually indicate upper middle class level according to McCall, the designation middle-middle is preferred here. This preference is based on two considerations--the relative absence of professionals and the fact that most of the group in this category fall toward the lower middle side of the distribution. In addition, upper working class is roughly equivalent to McCall's upper lower class category.

TABLE 2

High School Class and Follow-Up Samples by Occupational Level of Father

Fathers' Occupation	Total Class		Interview Sample		Mail Contacts		Total Follow-Up	
	N	%	N	%	N	%	N	%
				Males				
Major responsibility--large firms. . .	02	01.1	01	01.3	00	00	01	00.9
Major responsibility--small firms. . .	16	09.0	06	07.9	02	05.6	08	07.1
Minor responsibility	37	20.8	18	23.7	05	13.9	23	20.5
Supervision of manual and white collar workers.	63	35.4	30	39.5	09	25.0	39	34.8
Skilled trades .	49	27.5	21	27.6	15	41.7	36	32.1
Semi-skilled trades	06	03.4	00	00	04	11.1	04	03.6
No information	05	02.8	00	00	01	02.8	01	00.9
Total	178	100.0	76	100.0	36	100.1	112	99.9

(continued)

TABLE 2, Continued

Fathers' Occupations*	Total Class		Interview Sample		Mail Contacts		Total Follow-Up	
	N	%	N	%	N	%	N	%
Major responsibility--large firms. . .	00	00.0	00	00.00	00	00.0	00	00.0
Major responsibility--small firms. . .	13	07.5	09	09.6	02	05.1	11	08.3
Minor responsibility	38	21.9	17	18.1	08	20.5	25	18.8
Supervision of manual and white collar workers.	55	31.8	31	33.0	16	41.0	47	35.3
Skilled trades .	52	30.1	31	33.0	10	25.6	41	30.8
Semi-skilled trades	14	08.1	06	06.4	03	07.7	09	06.8
No information .	01	00.6	00	00.0	00	00.0	00	00.0
Total	173	100.0	94	100.1	39	99.9	133	100.0

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*See footnote for Table 1, page 1.

TABLE 3

High School Class and Follow-Up Samples by High School Academic Achievement-Grades

High School Grades*	Total Class		Interview		Mail		All Contact	
	N	%	N	%	N	%	N	%
Males								
1 to 1.5	57	32.0	20	26.3	13	36.1	33	29.4
1.6 to 2.0 . . .	54	30.3	23	30.2	10	27.8	33	29.4
2.1 to 2.5 . . .	34	19.1	13	17.1	05	13.9	18	16.1
2.6 to 3.0 . . .	09	05.1	05	06.6	01	02.8	06	05.4
3.1 to 3.5 . . .	09	05.1	04	05.3	05	13.9	09	08.0
3.6 to 4.0 . . .	13	07.3	09	11.9	02	05.6	11	10.0
No information .	02	01.1	02	02.6	00	00.0	02	01.8
Total	178	100.0	76	100.0	36	100.1	112	100.1
Females								
1 to 1.5	18	10.4	08	08.5	04	10.3	12	09.0
1.6 to 2.0 . . .	43	24.9	18	19.1	10	25.6	28	21.1
2.1 to 2.5 . . .	37	21.4	20	21.3	08	20.5	28	21.1
2.6 to 3.0 . . .	43	24.9	27	28.7	11	28.2	38	28.5
3.1 to 3.5 . . .	18	10.4	11	11.7	03	07.7	14	10.5
3.6 to 4.0 . . .	14	08.1	10	10.6	03	07.7	13	09.8
Total . . .	173	100.1	94	99.9	39	100.0	133	100.0

*Four-semester grade point average was compiled by averaging grades in the academic subjects (science, mathematics, English, etc., as opposed to music, art, shop courses, etc.) during the junior and senior years. This variable is referred to as "grades" in the body of the paper.

The scaling of this variable is as follows: 4 represents an A average. 1 represents a D average, the lowest passing grade.

TABLE 4

High School Class and Follow-Up Samples by High School Academic Achievement--Rank in Class

Rank in Class* (1 is high)	1960						1952	
	Interview		Mail		All Contact		All High School Class	
	N	%	N	%	N	%	N	%
				Males				
1st to 3rd decile	17	22.4	10	27.8	27	24.1	33	18.5
4th to 7th decile	29	38.1	08	22.2	37	33.0	66	37.0
8th to 10th decile	27	35.5	17	47.2	44	39.2	74	41.5
No information . .	03	03.9	01	02.8	04	03.6	05	02.8
Total	76	99.9	36	100.0	112	99.9	178	99.8
				Females				
1st to 3rd decile	47	50.0	15	38.5	62	46.6	76	43.9
4th to 7th decile	39	41.5	17	43.6	56	42.1	72	41.6
8th to 10th decile	07	07.4	06	15.4	13	09.8	23	13.3
No information . .	01	01.1	01	02.6	02	01.5	02	01.2
Total	94	100.0	39	100.1	133	100.0	173	100.0

*Computed by the school, based on grades in all subjects over four years of high school.

TABLE 5

High School Class and Follow-Up Samples by Tested Intelligence in High School

Intelligence*	Total Class		Interview		Mail		All Contact	
	N	%	N	%	N	%	N	%
			Males					
21 to 40 (low) .	22	12.4	05	06.6	05	13.9	10	09.0
41 to 50	55	30.9	26	34.2	08	22.2	34	30.3
51 to 60	45	25.3	19	25.0	09	25.0	28	35.0
61 to 80 (high)	33	18.5	16	21.0	10	27.8	26	23.2
No information .	23	12.9	10	13.2	04	11.1	14	12.6
Total	178	100.0	76	100.0	36	100.0	112	100.0
			Females					
21 to 40 (low) .	22	12.7	07	07.4	05	12.8	12	09.0
41 to 50	56	32.4	32	34.0	10	25.6	42	31.5
51 to 60	70	40.5	39	41.5	17	43.6	56	42.1
61 to 80 (high)	13	07.5	09	09.6	03	07.7	12	09.0
No information .	12	06.9	07	07.4	04	10.3	11	08.3
Total	173	100.0	94	99.9	39	100.0	133	99.9

*The I.Q. scores used were based upon a composite score of the ACE and OTIS tests administered when the subjects were seniors in high school. The procedure used to obtain the scores was as follows: all subjects were administered the 1948 High School Edition of the American Council on Education Psychological Examination and the Gamma form of the Otis Quick Scoring Mental Ability Test. The scores on these two instruments were distributed and percentile scores obtained for each individual. These percentile scores were normalized with a mean of fifty and a standard deviation of ten. A normalized score was obtained for each subject on each of these instruments. These two scores were combined and averaged, giving a composite score from the two instruments for each individual. The I.Q. scores are thus based on a mean of fifty and a standard deviation of ten.

TABLE 6

High School Class and Follow-Up Samples by Disparity Between Academic Achievement and Achievement Predicted on the Basis of IQ Test Scores

Disparity*	Total Class		Interview		Mail		All Contact	
	N	%	N	%	N	%	N	%
				Males				
+8 to +30	20	11.2	09	11.8	01	02.8	10	09.0
+2 to +7	31	17.4	16	21.1	08	22.2	24	21.4
+1 to -1	16	09.0	09	11.8	04	11.1	13	11.6
-2 to -7	42	23.6	17	22.4	08	22.2	25	22.3
-8 to -30	61	34.2	22	28.9	12	33.3	34	30.3
No information .	08	04.5	03	03.9	03	08.3	06	05.4
Total	178	99.9	76	99.9	36	99.9	112	100.0
				Females				
+8 to +30	47	27.2	25	26.6	13	33.3	38	28.6
+2 to +7	55	31.8	35	37.2	07	18.0	42	31.6
+1 to -1	28	16.2	11	11.7	07	18.0	18	13.5
-2 to -8	26	15.0	17	18.1	06	15.4	23	17.3
-8 to -30	15	08.7	06	06.4	04	10.3	10	07.5
No information .	02	01.2	00	00.0	02	05.1	02	01.5
Total	173	100.1	94	100.0	39	100.1	133	100.0

*The disparity scores were obtained by subtracting the composite score figured for I.Q. from the standard score on the grade point average distribution. Those with positive differences in scores are the overachievers, and those with negative difference scores are the underachievers.

TABLE 7

High School Class and Follow-Up Samples by Number of Mutual Choice Friends

Mutual Choice Friends*	Total Class		Interview		Mail		All Contact	
	N	%	N	%	N	%	N	%
				Males				
None	52	29.2	17	22.4	11	30.5	28	25.0
One	32	18.0	11	14.5	04	11.1	15	13.4
Two to three . .	52	29.2	29	38.1	10	27.8	39	34.8
Four to six . . .	27	15.1	13	17.1	08	22.2	21	18.8
Seven to nine . .	06	03.4	04	05.3	01	02.8	05	04.5
No information .	09	05.0	02	02.6	02	05.6	04	03.6
Total	178	99.9	76	100.0	36	100.0	112	100.1
				Females				
None	17	09.8	07	07.4	04	10.3	11	08.3
One	34	19.7	15	15.9	11	28.2	26	19.5
Two to three . .	45	26.0	23	24.4	09	23.1	32	24.1
Four to six . . .	44	25.4	30	31.9	06	15.4	36	27.1
Seven to nine . .	26	15.0	15	16.0	07	18.0	22	16.5
No information .	07	04.0	04	04.3	02	05.1	06	04.5
Total	173	99.9	94	99.9	39	100.1	133	100.0

*Mutual choice friends (reciprocated friendship choices) were obtained by a question soliciting information about friendships (stated ". . . the fellows and girls you know, inside and outside of school, who are your really best friends, chums or close pals?"). Although the friendship choices were gained pertaining to both in-school and out-of-school friends, these choices were made by members of our sample only. Thus, since"mutual choice friends" deals with reciprocated friendship choices, this measure refers only to friends within the senior class.

TABLE 8

Total High School Sample and Follow-Up Samples by Formal High School Associations

Formal School Associations	Total Class		Interview		Mail		All Contact	
	N	%	N	%	N	%	N	%
				Males				
None, one	57	32.0	20	26.3	08	22.2	28	25.0
Two, three . . .	82	46.1	41	53.9	16	44.4	57	50.8
Four to seven . .	36	20.2	14	18.4	10	27.8	24	21.4
No information .	03	01.7	01	01.3	02	05.6	03	02.7
Total	178	100.0	76	99.9	36	100.0	112	99.9
				Females				
None, one . . .	62	35.8	26	27.6	19	48.7	45	33.8
Two, three . . .	66	38.1	36	38.3	12	30.8	48	36.1
Four to seven . .	42	24.3	31	33.0	07	18.0	38	28.6
No information . .	03	01.7	01	01.1	01	02.6	02	01.5
Total	173	99.9	94	100.0	39	100.1	133	100.0

APPENDIX 2

Social Characteristics of the Young Adult Sample

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8. Social Mobility 6

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[*] These distributions provide descriptive information about the total group of 245 when data are available; other tables include only the interview group.

TABLE 1

College Attendance

Amount of Education	All Men		All Women	
	N	%	N	%
High School	18	24.7	57	74.0
Some College	31	42.5	13	16.9
Completed College	16	21.9	7	9.1
Some Graduate Work	5	6.8	0	0.0
M.A. and Post-M.A.	3	4.1	0	0.0
Ph.D. or Equivalent	0	0.0	0	0.0
No information	1		0	
Total	74	100.0	77	100.0

TABLE 2

Occupational Level of Follow-Up Group

Occupational Level*	Males		Females	
	N	%	N	%
Major responsibility--large firms	01	00.9	01	00.8
Major responsibility--small firms	11	10.0	09	06.8
Minor responsibility.	47	42.7	45	33.8
Supervision	18	16.4	33	24.8
Skilled trades	23	20.9	36	27.0
Semi-skilled trades	10	9.1	09	06.8
No information	02		00	
Total	112	100.0	133	100.0

*See Table 1, Appendix 1, footnote for more complete description of occupational categories.

TABLE 3

Salary

Salary Level	All Men		All Women	
	N	%	N	%
Part-time, less than $100/mo.				
Part-time, more than $100/mo.				
Less than $200/mo.				
$201-250/mo.	1	1.4	1	1.3
$251-300/mo.	2	2.9	1	1.3
$301-350/mo.	4	5.8	6	7.9
$351-400/mo.	8	11.6	8	10.5
$401-450/mo.	8	11.6	8	10.5
$451-500/mo.	17	24.6	14	18.4
$501-600/mo.	17	24.6	14	18.4
More than $600 mo.	12	17.4	24	31.6
No information	5		1	
Total	74	100.1	77	99.9

TABLE 4

Change in Residence Since High School

Place of Residence	Male		Female	
	N	%	N	%
No change since high school graduation	39	36.4	33	25.6
Moved within Chicago	13	12.1	17	13.2
Moved within Cook County	29	27.1	44	34.1
Moved within State of Illinois .	08	7.5	05	3.9
Moved within United States . . .	18	16.8	30	23.3
No information	05		04	
Total	112	99.9	133	100.1

TABLE 5

Marital Status of Follow-Up Group

Marital Status	Male		Female	
	N	%	N	%
Single	32	29.1	21	15.8
Married	78	70.9	112	84.1
No information	02		00	
Total	112	100.0	133	99.9

TABLE 6

Year of Marriage in Relation to Year of Graduation from High School

Year of Marriage in Relation to Graduation from High School	Male		Female	
	N	%	N	%
Less than one year after graduation	5	9.8	13	18.6
One to two years after graduation	6	11.8	10	14.3
Two to three years after graduation	5	9.8	19	27.1
Three to four years after graduation	14	27.4	14	20.0
Four to five years after graduation	9	17.6	10	14.3
Six and more years after graduation	12	23.5	4	5.7
No information	00	____	00	____
Total	51	99.9	70	100.0

TABLE 7

Number of Children of Follow-Up Group

Number of Children	Males		Females	
	N	%	N	%
None	11	22.4	14	20.0
One	21	42.9	14	19.9
Two	14	28.6	25	35.7
Three	3	6.1	9	12.9
Four	00	00.0	6	8.6
Five	00	00.0	2	2.9
No information	2		0	
Total	51	100.0	70	100.0

TABLE 8

Social Mobility*

Direction of Social Mobility	Married Males		Single Males		Married Women	
	N	%	N	%	N	%
Up	16	34.8	10	41.7	22	33.3
Stable	19	41.3	12	50.0	29	43.9
Down	11	23.9	2	8.3	15	22.7
Total	46	100.0	24	100.0	66	99.9

*Social mobility was defined by the difference in class level between father and subject. For this comparison, classes were defined using the procedure outlined in Appendix 1.

APPENDIX 3

Interviewers' Ratings of Adult Role Acceptance

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[*] These tables represent the range of variables examined. A number of other variables were studied, none of which showed a significant relationship with interviewers' ratings. These were:

Occupational Identity
Teachers' Rating of Apparent Sociability
Level of Education Attained
Disparity between Academic Performance and Performance as Predicted on the basis of IQ
Geographic Mobility
Housing
Number of Children
Religion
Military Service
Popularity
Ego Functioning
Informal School Associations
Parental Strictness

[+] The interviewers' ratings of adult role acceptance is a global evaluation of the completeness of transition from adolescence to young adulthood. The variable summarizes data pertaining sense of self-imposed direction, participation with intimates and fulfillment of societal expectations in terms of marriage, family, work and independent residence.

TABLE 1

Interviewers' Ratings and Intelligence

Intelligence	Interviewers' Ratings					
	High		Medium		Low	
	N	%	N	%	N	%
			Males			
High	12	48.0	9	40.9	13	76.5
Low	13	52.0	13	59.1	4	23.5
Total	25	100.0	22	100.0	17	100.0
			Females			
High	24	64.9	15	55.6	9	45.0
Low	13	35.1	12	44.4	11	55.0
Total	37	100.0	27	100.0	20	100.0

TABLE 2

Interviewers' Ratings and Rank in Class

Rank in Class	Interviewers' Ratings					
	High		Medium		Low	
	N	%	N	%	N	%
	Males					
High	4	16.0	7	25.9	6	35.3
Low	21	84.0	20	74.1	11	64.7
Total	25	100.0	27	100.0	17	100.0
	Females					
High	24	64.9	16	53.3	6	27.3
Low	13	35.1	14	46.7	16	72.7
Total	37	100.0	30	100.0	22	100.0

TABLE 3

Interviewers' Ratings and Social Class Background

Parental Social Status	Interviewers' Ratings					
	High		Medium		Low	
	N	%	N	%	N	%
			Males			
High	9	47.4	14	56.0	17	65.4
Low	10	52.6	11	44.0	9	34.6
Total	19	100.0	25	100.0	26	100.0
			Females			
High	9	40.9	14	48.3	20	54.1
Low	13	59.1	15	51.7	17	45.9
Total	22	100.0	29	100.0	37	100.0

TABLE 4

Interviewers' Rating and Number of Mutual Choice Friends

Mutual Choice Friends	Interviewers' Ratings					
	High		Medium		Low	
	N	%	N	%	N	%
			Males			
High	11	57.9	18	66.7	15	60.0
Low	8	42.1	9	33.3	10	40.0
Total	19	100.0	27	100.0	25	100.0
			Females			
High	7	36.8	13	40.6	16	45.7
Low	12	63.2	19	59.4	19	54.3
Total	19	100.0	32	100.0	35	100.0

TABLE 5

Interviewers' Rating and Number of Formal School Associations

Formal School Associations	Interviewers' Ratings					
	High		Medium		Low	
	N	%	N	%	N	%
Males						
High	9	47.4	11	39.3	13	52.0
Low	10	52.6	17	60.7	12	48.0
Total	19	100.0	28	100.0	25	100.0
Females						
High	9	42.9	17	54.8	24	63.2
Low	12	57.1	14	45.2	14	36.8
Total	21	100.0	31	100.0	38	100.0

TABLE 6

Interviewers' Ratings and Young Adult Occupational Level

Occupational Level	Interviewers' Ratings					
	High		Medium		Low	
	N	%	N	%	N	%
			Males			
High	23	88.5	19	70.4	12	63.2
Low	3	11.5	8	29.6	7	36.8
Total	26	100.0	27	100.0	19	100.0
			Females			
High	27	71.1	20	64.5	15	65.2
Low	11	28.9	11	35.5	8	34.8
Total	38	100.0	31	100.0	23	100.0

TABLE 7

Interviewers' Rating and Young Adult Salary

Salary	Interviewers' Ratings					
	High		Medium		Low	
	N	%	N	%	N	%
			Males			
High	14	58.3	10	38.5	5	26.3
Low	10	41.7	16	61.5	14	73.7
Total	24	100.0	26	100.0	19	100.0
			Females			
High	22	59.5	15	53.6	5	31.3
Low	15	40.5	13	46.4	11	68.8
Total	37	100.0	28	100.0	16	100.0

APPENDIX 4

INDUCTION INTO OCCUPATIONAL ROLES

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TABLE 1

Post-Graduation Plans

Plans	Males		Females	
	N	%	N	%
Service	3	4.5	00	00.0
Further schooling	47	71.2	16	40.0
Job unspecified	12	18.2	12	30.0
Marriage	00	00.0	11	27.5
Travel	00	00.0	1	2.5
No plans	4	6.7	00	00.0
Total	66	100.0	40	100.0

TABLE 2

Motivations for Working Part-time During High School

Reasons for Taking Job*	Males		Females	
	N=74	%	N=77	%
Wanted the experience	7	9.5	30	39.0
Wanted money of their own though parents could afford it	31	41.9	34	44.2
Needed money to help support parents	2	2.7	4	5.2
Parents wanted them to work .	3	4.1	3	3.9
Because friends worked . . .	3	4.1	7	9.1
Needed their own money, parents did not have enough to give	17	23.0	13	16.9
Liked to work	9	12.2	13	16.9
Other	3	4.0	4	5.2
Had no job	18		10	

*Multiple choice question; percentages based on students who held part-time job.

TABLE 3

Number of Jobs Since Graduation

Total Jobs	Males		Females	
	N	%	N	%
One	21	30.0	30	39.0
Two	20	28.6	19	24.7
Three	15	20.3	9	11.7
Four	7	9.4	9	11.7
Five	4	5.4	4	5.2
Six	2	2.7	1	1.3
More than six	1	1.4	2	2.6
None	4	5.4	3	3.9
Total	74	100.0	77	100.1

TABLE 4

Occupational Aspiration in High School and Occupational Achievement in Young Adulthood (Males)

Occupational Level*	Aspiration (1952)						Achievement (1960)					
	Married		Single		Total		Married		Single		Total	
	N	%	N	%	N	%	N	%	N	%	N	%
Major responsibility . .	17	29.8	13	54.2	30	37.0	4	7.8	4	18.2	6	11.3
Minor responsibility, supervision . . .	29	50.9	8	33.3	37	45.7	32	62.7	14	63.6	46	64.8
Skilled & semi-skilled, heavy labor . . .	11	19.3	3	12.5	14	17.3	15	29.4	4	18.2	19	26.8
Total . . .	57	100.0	24	100.0	81	100.0	51	99.9	22	100.0	71	102.9

*For definition of these categories see Appendix I, Table 1.

TABLE 5

The Timing of Occupational Choice* (Males)

Time Period	Married		Single		Total	
	N	%	N	%	N	%
Before graduation from high school	15	34.9	4	19.0	19	29.7
Within 3 years after high school	13	30.2	6	28.6	19	29.7
From 4 to 8 years after high school	15	34.9	11	52.4	26	40.6
Total	43	100.0	21	100.0	64	100.0

*In response to the question: "When did you first decide to go into your present field of work?"

TABLE 6

Commitment to Current Occupation*

Continue in Present Occupation	Males		Females	
	N	%	N	%
Yes	44	69.8	3	25.0
No	17	26.9	7	58.3
Depends	2	3.2	2	16.7
Total	63	99.9	12	100.0

*In response to the question: "Would you like to spend the next ten years or so in your present line of work?"

TABLE 7

Initial Contact With Present Job (Males)

Source of Contact	Married		Single		Total	
	N	%	N	%	N	%
On my own	20	45.5	13	68.4	33	52.4
With outside help (friend, relative)	18	40.9	3	15.8	21	33.3
School or other placement service	1	2.3	2	10.5	3	4.8
Other	5	11.4	1	5.3	6	9.5
Total	44	100.1	19	100.0	63	100.0

*In response to the question: "How did you get the job you now have?"

TABLE 8

Length of Time on Present Job

Time Interval	Males N	Males %	Females N	Females %
0 to 6 months	16	25.8	4	26.7
6 months to 1 year	16	25.8	2	13.3
1 year to 2 years	13	21.0	4	26.7
2 years to 4 years	12	19.4	1	6.7
4 years to 7 years	5	8.1	4	26.7
Total	62	100.1	15	100.1

TABLE 9

Length of Time with Present Company

Time Interval	Males N	Males %	Females N	Females %
0 to 6 months	9	13.4	3	18.8
6 months to 1 year	13	19.4	2	12.5
1 year to 2 years	13	19.4	4	25.0
2 years to 4 years	17	25.4	2	12.5
4 years to 7 years	15	22.4	5	31.2
Total	67	100.0	16	100.0

TABLE 10

Attitude Toward Advancement in Present Job*

Job Potential	Males		Females	
	N	%	N	%
Very good	14	21.9	00	00.0
Good	33	51.6	3	42.9
Limited	2	3.1	00	00.0
Depends on need (expansion of company, etc.)	7	10.9	1	14.3
Can't say (don't know) . .	00	00.0	00	00.0
None	6	9.4	3	42.9
Other	1	1.6	00	00.0
Currently unemployed . . .	1	1.6	00	00.0
Total	64	100.1	7	100.1

*In response to the question: "As you see the job now, what kind of future would you say you have in it?"

APPENDIX 5

Family Attitudes and Interaction

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The tables presented in this appendix show attitudes and behavior in relation to the subjects' families. The data presented deal with orientation towards their children and parents, and frequency and type of interaction with parents.

These data bear on Talcott Parsons (120) theories about the isolation of the nuclear family. In his view, the American (especially middle-class) family is quite insulated from interaction with the extended family. The causes for this isolation are multilineality, and geographic, occupational, and social mobility. However, both Litwak (98) and Sussman (139) argue that interaction within the extended family has been underemphasized.

Although we have no evidence of the relative isolation of our subjects (i.e., the amount of interaction relative to comparable individuals in societies with different patterns of kinship structure, and economic patterns, or even amount of interaction with parents as compared to the amount that the parents interacted with *their* parents), our data reveal patterns of frequent interaction within the extended family.

Sixty-eight percent of our male subjects and sixty-four percent of our female subjects claimed that they see their parents *at least* once a week. Only ten percent of the males and fifteen percent of the females see their parents less than once a month. Sixty-two percent of the males and seventy-five percent of the females talk by telephone with their parents at least once per week.

In addition, forty-five percent of males and thirty-five percent of the females see their in-laws at least once a week. Fifty-nine percent of the males and fifty-four percent of the females talk with their in-laws by telephone at least once a week.

Another indicator of the absence of isolation of the nuclear family is the statement of feeling of freedom to ask parents for financial help. Eighty-nine percent of the males and eighty-three percent of the females claimed that they would feel free to ask their own parents for financial aid (although very few of them were actually receiving such aid). Sixty-nine percent of the males and sixty-three percent of the females stated that they felt free to ask financial help from their spouse's family, although again the percentage actually receiving such help was small.

TABLE 1

Attitudes about Generational Changes in Child Rearing*

Would Maintain Parents' Pattern	Males		Females	
	N	%	N	%
Yes	18	40.9	35	53.0
No	25	56.8	27	40.9
Don't know	00	00.0	00	00.0
In some ways	1	2.3	4	6.1
Total	44	100.0	66	100.0

*In response to the question: "Are you going to bring up your children any differently than you were brought up?"

TABLE 2

Attitudes about Strictness in Child Rearing*

Would Be More Strict	Males		Females	
	N	%	N	%
Yes	9	22.5	17	29.3
No	28	70.0	40	69.0
In some ways	3	7.5	1	1.7
Total	40	100.0	58	100.0

*In response to the question: "Are you going to be more strict with your children than your parents were with you?"

TABLE 3

Sources of Advice on Child Rearing

Source	Males		Females	
	N=45	%	N=68	%
Parents	8	17.8	12	17.6
In-laws	6	13.3	1	1.5
Other relatives	4	8.9	5	7.4
Friends	3	6.7	12	17.6
Specialists	2	4.4	10	14.7
Books and magazines	5	11.1	9	13.2
I depend on my own common sense	34	75.5	40	58.8
Other	3	6.7	4	5.9
I do not have any children	8	17.8	11	16.2
Total	45		68	

TABLE 4

Willingness to Seek Financial Aid from Parents

Would Seek Aid	Males		Females	
	N	%	N	%
Yes	40	88.9	57	82.6
No	5	11.1	12	17.4
Total	45	100.0	69	100.0

TABLE 5

Willingness to Seek Financial Aid from Spouse's Parents

Would Seek Aid	Males		Females	
	N	%	N	%
Yes	31	68.9	42	62.7
No	14	31.1	25	37.3
Total	45	100.0	67	100.0

TABLE 6

Frequency of Face-to-Face Contact with Parents

Frequency	Males		Females	
	N	%	N	%
More than twice a week . . .	7	17.1	10	15.2
Once or twice a week	21	51.2	32	48.5
Once or twice a month . . .	9	22.0	14	21.2
Less frequently	4	9.8	10	15.2
Total	41	100.1	66	100.1

TABLE 7

Frequency of Telephone Contact with Parents

Frequency	Males		Females	
	N	%	N	%
Daily	2	5.4	17	28.8
3-6 times per week	5	13.5	7	11.9
Once or twice a week . . .	16	43.2	20	33.9
Every other week--once a month	6	16.2	5	8.5
Rarely--a few times a year.	7	18.9	5	8.5
Never (live so close) . . .	1	2.7	2	3.4
Never	00	00.0	3	5.1
Total	37	99.9	59	100.1

TABLE 8

Frequency of Mail Contact with Parents

Frequency	Males		Females	
	N	%	N	%
Once a week or more	2	40.0	4	36.4
Once a month	1	20.0	4	36.4
Once every 2-3 months . . .	1	20.0	0	
Less frequently	00	00.0	1	9.1
I do not correspond with them	1	20.0	2	18.2
Total	5	100.0	11	100.1

TABLE 9

Frequency of Face-to-Face Contact with Spouse's Parents

Frequency	Males		Females	
	N	%	N	%
More than twice a week . . .	4	9.5	5	8.5
Once or twice a week	15	35.7	18	30.5
Once or twice a month . . .	14	33.3	19	32.2
Less frequently	9	21.4	17	28.8
Total	42	99.9	59	100.0

TABLE 10

Frequency of Telephone Contact with Spouse's Parents

Frequency	Males		Females	
	N	%	N	%
Daily	2	5.9	2	4.3
Three to six times a week .	4	11.8	3	6.5
Once or twice a week . . .	14	41.2	20	43.5
Every other week--once a month	6	17.6	5	10.9
Rarely--a few times a year.	7	20.6	13	28.2
Never (live so close) . . .	00	00.0	1	2.2
Never	1	2.9	2	4.3
Total	34	100.0	46	99.9

Frequency of Mail Contact with Spouse's Parents

Frequency	Males		Females	
	N	%	N	%
Once a week or more	5	45.5	4	25.0
Once a month	4	36.4	7	43.8
Once every two or three months	00	00.0	00	00.0
Less frequently	00	00.0	1	6.3
I do not correspond with them	2	18.2	4	25.0
Total	11	100.1	16	100.1

APPENDIX 6

Evaluation of Post-High School Achievement

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TABLE 1

Self-Evaluation in Relation to Peers*

Have Done as Well as Peers	Males N	Males %	Females N	Females %
Yes	56	80.0	72	96.0
No	9	12.9	2	2.7
In some ways, don't know .	5	7.1	1	1.3
Total	70	100.0	75	100.0

*In response to the question: "Do you think you have gotten as far as most of the people your age?"

TABLE 2

Satisfaction with Achievement Since High School--Family*

Degree of Satisfaction	Males N	Males %	Females N	Females %
Very satisfied	40	57.1	46	60.5
Satisfied	22	31.4	28	36.8
Could be better	6	8.6	2	2.6
Dissatisfied	2	2.9	00	00.0
Total	70	100.0	76	99.9

*In response to the question: "Are you satisfied with whatever you have accomplished since high school in terms of family?"

TABLE 3

Satisfaction with Achievement Since High School--Work*

Degree of Satisfaction	Males		Females	
	N	%	N	%
Very satisfied	24	34.3	22	30.6
Satisfied	22	31.4	47	65.3
Could be better	21	30.0	2	2.8
Dissatisfied	3	4.3	1	1.4
Total	70	100.0	72	100.1

*In response to the question: "Are you satisfied with whatever you have accomplished since high school in terms of work?"

TABLE 4

Satisfaction with Achievement Since High School--Interpersonal*

Degree of Satisfaction	Males		Females	
	N	%	N	%
Very satisfied	23	32.9	28	36.8
Satisfied	34	48.6	41	53.9
Could be better	13	18.6	6	7.9
Dissatisfied	00	00.0	1	1.3
Total	70	100.1	76	99.9

*In response to the question: "Are you satisfied with whatever you have accomplished since high school in terms of relations with people in general?"

APPENDIX 7

Retrospective Views of High School Experience

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TABLE 1

Interest in High School Activities, First Choice[*]

Activities	Males		Females	
	N	%	N	%
Sports	23	31.9	8	10.5
Dating	1	1.4	13	17.1
Clubs, in and out of school. .	3	4.2	11	14.5
Informal social activities . .	11	15.3	2	2.6
School activities	1	1.4	7	9.2
Studies	14	19.4	13	17.1
Family activities	2	2.8	7	9.2
Church affiliated activities .	2	2.8	8	10.5
Outside interests, including reading, hobbies	8	11.1	5	6.6
Work	4	5.6	1	1.3
Others	3	4.2	1	1.3
Total	72	100.1	76	99.9

---

[*] Ranked in response to the question: "When you were in school, what activities were you interested in?"

TABLE 2

Interest in High School Activities, Second Choice

Activities	Males		Females	
	N	%	N	%
Sports	10	13.9	9	11.8
Dating	11	15.3	10	13.2
Clubs, in and out of school. .	4	5.6	4	5.3
Informal social activities . .	9	12.5	8	10.5
School activities	11	15.3	6	7.9
Studies	12	16.7	15	19.7
Family activities	3	4.2	6	7.9
Church affiliated activities .	1	1.4	3	3.9
Outside interests, including reading, hobbies	6	8.3	2	2.6
Work	5	6.9	13	17.1
Total	72	100.1	76	99.9

TABLE 3

Interest in High School Activities, Third Choice

Activities	Males		Females	
	N	%	N	%
Sports	3	4.1	9	12.2
Dating	3	4.1	3	4.1
Clubs, in and out of school. .	9	12.3	8	10.8
Informal social activities . .	3	4.1	6	8.1
School activities	7	9.6	4	5.4
Studies	1	1.4	00	00.0
Family activities	00	00.0	2	2.7
Church affiliated activities .	13	17.8	13	17.6
Outside interests, including reading, hobbies, etc . . .	18	24.7	10	13.5
Work	16	21.9	18	24.3
Others	00	00.0	1	1.4
Total	73	100.0	74	100.1

TABLE 4

Attitudes About Value of High School Courses (Least Useful)*

Courses	Males		Females	
	N	%	N	%
English	4	5.8	3	4.2
Foreign language	19	27.5	18	25.0
History	11	15.9	9	12.5
Social studies, civics	8	11.6	5	6.9
Math	4	5.8	9	12.5
Science	9	13.0	15	20.8
Music, art, drama	17	24.6	12	16.7
Shop or home economics	2	2.9	2	2.8
Business, bookkeeping, typing	3	4.3	5	6.9
Vocational guidance, future career or occupation	5	7.2	7	9.7
Physical Education	1	1.4	3	4.2
Public speaking	2	2.9	1	1.4
All helped	2	2.9	3	4.2
None	6	8.7	2	2.8
Total	69		72	

---

*In response to the question: "What high school course or courses do you think have helped you the least since graduation?"

TABLE 5

Attitudes About Value of High School Courses (Most Useful)*

Courses	Males		Females	
	N	%	N	%
English	32	46.4	25	33.1
Foreign language	1	1.4	1	1.4
History	2	2.9	5	6.8
Social sciences, civics . . .	7	10.1	5	6.8
Math	35	50.7	8	10.8
Science	15	21.7	2	2.7
Music, art, drama	1	1.4	4	5.4
Shop or home economics . . .	19	27.5	11	14.9
Business, bookkeeping, typing	9	13.0	49	66.2
None	5	7.2	2	2.7
Physical education	00	00.0	00	00.0
All helped	1	1.4	5	6.8
Public speaking	4	5.8	1	1.4
Total	69		74	

*In response to the question: "What high school course or courses do you think have helped you the most since graduation?"

TABLE 6

Attitudes of Parents Towards High School Grades*

Parental Attitudes	Males		Females	
	N	%	N	%
Father				
Insisted on good grades . . .	8	12.1	11	15.7
Interested in good grades . .	51	77.3	47	67.1
Had some interest, but not a great deal	5	7.6	10	14.3
Didn't care	2	3.0	2	2.9
Total	66	100.0	70	100.0
Mother				
Insisted on good grades . . .	14	20.3	12	15.8
Interested in good grades . .	48	69.6	51	67.1
Had some interest, but not a great deal	6	8.7	12	15.8
Didn't care	1	1.4	1	1.3
Total	69	100.0	76	100.0

*In response to the question: "How did your parents feel about your grades in high school?"

TABLE 7

Identification Models*

Persons Whom Subjects Wanted to Be Like	Males		Females	
	N	%	N	%
Fellow student or peer	1	3.2	4	18.2
Sibling	3	9.7	1	4.5
Parent	9	29.0	10	45.5
Relative	3	9.7	2	9.1
Teacher	3	9.7	4	18.2
Famous personality	8	25.8	1	4.5
Other adult	3	9.7	00	00.0
Other	1	3.2	00	00.0
Total	74	100.0	22	100.0

[*] In response to the question: "When you were in high school, what person did you want to be like?"

TABLE 8

Parental Interest in Planning Post-High School Careers[*]

Parental Interest in Post-High School Plan	Males N	Males %	Females N	Females %
		Father		
Very interested[+].	36	53.7	30	43.5
Very interested	12	17.9	17	24.6
Somewhat interested	7	10.4	14	20.3
Somewhat interested	7	10.4	5	7.2
Very little interested	3	4.5	1	1.4
Very little interested	2	3.0	2	2.9
Total	67	99.9	69	99.9
		Mother		
Very interested	38	54.3	32	41.6
Very interested	10	14.3	22	28.6
Somewhat interested	15	21.4	16	20.8
Somewhat interested	4	5.7	3	3.9
Very little interested	1	1.4	1	1.3
Very little interested	2	2.9	3	3.9
Total	70	100.0	77	100.1

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[*] In response to the question: "How interested were your parents in what you were planning to do after high school?"

[+] Set up on a six-point rating scale, with three broad categories sub-divided.

TABLE 9

Parental Concern About Academic Achievement

Parental Attitudes	Males		Females	
	N	%	N	%
Father				
Unreasonably strict	00	00.0	1	1.5
Strict	16	24.6	13	19.4
Fair	35	53.8	45	67.2
Lenient	12	18.5	8	11.9
Too lenient	2	3.1	00	00.0
Total	65	100.0	67	100.0
Mother				
Unreasonably strict	00	00.0	1	1.3
Strict	19	27.5	13	17.1
Fair	36	52.2	52	68.4
Lenient	11	15.9	10	13.2
Too lenient	3	4.3	00	00.0
Total	69	99.9	76	100.0

TABLE 10

Effort Devoted to Course Work*

Amount of Effort Exerted	Males		Females	
	N	%	N	%
Yes, very hard	9	13.0	10	15.1
Harder than most	12	17.4	13	19.7
Enough to keep up	39	56.5	36	54.5
Less than most	5	7.2	2	3.0
Very little	4	5.8	5	7.6
Total	69	99.9	77	99.9

*In response to the question: "Would you say that you worked hard on your school work during your senior year?"

TABLE 11

Parental Strictness*

Parental Restrictiveness	Males		Females	
	N	%	N	%
Father				
Unreasonably strict	1	1.5	3	4.5
Strict	13	19.7	19	28.4
Fair	31	47.0	30	44.8
Lenient	20	30.3	11	16.4
Too lenient	1	1.5	4	6.0
Total	66	100.0	67	100.1
Mother				
Unreasonably strict	1	1.4	3	3.9
Strict	8	11.6	14	18.2
Fair	33	47.8	40	51.9
Lenient	27	39.1	15	19.5
Too lenient	00	00.0	5	6.5
Total	74	99.9	77	100.0

*In response to the question: "How strict or lenient were your parents when you were a senior in high school?"

TABLE 12

Time of First Dating Experience*

When Started Dating	Males N	Males %	Females N	Females %
In grade school	5	6.8	11	14.3
As a freshman	16	21.6	24	31.2
As a sophomore	16	21.6	19	24.7
As a junior	20	27.0	18	23.4
As a senior	14	18.9	3	3.9
In first year after graduation	2	2.7	2	2.6
After first year after graduation	1	1.4	00	00.0
Total	74	100.0	77	100.1

*In response to the question: "When did you start dating?"

TABLE 13

First Dating Compared with Peers*

Dating in Relation to Peers	Males N	Males %	Females N	Females %
Earlier	2	2.7	8	10.5
About the same time	39	53.4	47	61.8
Later	32	43.8	21	27.6
Total	73	99.9	76	99.9

*In response to the question: "Do you think you started dating earlier, later, or about the same time as most kids?"

TABLE 14

Amount of High School Dating[*]

Frequency of Dating	Males		Females	
	N	%	N	%
Not at all	2	2.7	1	1.3
Very infrequently (perhaps once or twice during school year)	8	10.8	5	6.5
Occasionally (went to big school dances, had movie dates once in a while . . .	27	36.5	15	19.5
Frequently (had dates on most Saturday nights, or on other weekend nights . .	26	35.1	34	44.2
Very often (had dates for most week end nights; also weekday nights)	11	14.9	22	28.6
Total	74	100.0	77	100.1

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[*] In response to the question: "Did you date as a senior in high school?"

TABLE 15

Dating Patterns

Dating Pattern	Male		Female	
	N	%	N	%
Usually single dated	12	17.4	7	9.6
Usually double dated	29	42.0	23	31.5
Usually went out with a crowd.	7	10.1	10	13.7
Both single and double dated .	8	11.6	9	12.3
Both single dated and went out with a crowd	00	00.0	1	1.4
Both double dated and went out with a crowd	10	14.5	8	11.0
All three	3	4.3	15	20.5
Total	69	99.9	73	100.0

[*] In response to the question: "When you took out a girl as a senior, did you usually single date, double date or did you go out with a crowd?"

TABLE 16

Characteristics Valued in Opposite Sex Peers*

Qualities	Males		Females	
	N	%	N	%
Popularity	3	4.2	5	6.9
Physical appearance	45	62.5	32	44.4
Personality	32	44.4	26	36.1
Intelligence	13	18.0	7	9.7
Good athlete	1	1.4	4	5.6
Friendliness	2	2.8	2	2.8
Well-mannered	3	42.0	16	22.2
To be active in things	00	00.0	2	2.8
Fun to be with	15	20.8	6	8.3
Easy to be with	11	15.3	7	10.0
Common interests	3	4.2	2	2.8
Family background	1	1.4	00	00.0
Future plans	00	00.0	5	6.9
Maturity	1	1.4	3	4.2
Good character	3	4.2	4	5.6
Total	72		72	

*In response to the question: "What did you think was important in a girl/boy as a senior?"

APPENDIX 8

The Relation of Adjustment Scores to Selected Variables[*]

List of Tables[*]

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5. Adjustment Scores and Number of Mutual Choice Friends 3

6. Adjustment Scores and Formal School Association . 3

7. Adjustment Scores and Young Adult Occupational Level 4

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[*] These tables represent the range of variables examined. A number of other variables were examined, none of which showed significant association with Adjustment Scores. These were:

How often Parents Are Seen
Number of Friends
Proportion of Friends Who Were in Attendance of the High School
Activities of Most Interest in High School
Amount of Dating as a Senior in High School
Time of Beginning of Dating
Parental Interest in Grades--Father
Parental Interest in Grades--Mother
Social Class Background
Level of Education Attained
Nature of Relationship with Parents in High School--Mother
Nature of Relationship with Parents in High School--Father
Nature of Relationship with Parents in High School--Both
Informal School Associations

[+] Adjustment is a composite measure made up of equal weightings of (1) Interviewer's Ratings of adult role acceptance; (2) Expressed Satisfaction with Work, Family and People; (3) Ego Functioning as Young Adults; and (4) the Stability factor from the Semantic Differential.

TABLE 1

Adjustment Scores and Intelligence

IQ	Adjustment Scores					
	High		Medium		Low	
	N	%	N	%	N	%
			Males			
High	12*	52.2	8	53.3	11	68.8
Low	11	47.8	7	46.7	5	31.3
Total	23	100.0	15	100.0	16	100.1
			Females			
High	9	60.0	13	68.4	9	36.0
Low	6	40.0	6	31.6	16	64.0
Total	15	100.0	19	100.0	25	100.0

*x^2 Not significant.

TABLE 2

Adjustment Scores and Rank in Class

Rank in Class	Adjustment Scores					
	High		Medium		Low	
	N	%	N	%	N	%
			Males			
High	7*	30.4	4	25.0	4	23.5
Low	16	69.6	12	75.0	13	76.5
Total	23	100.0	16	100.0	17	100.0
			Females			
High	10	62.5	14	70.0	9	33.3
Low	6	37.5	6	30.0	18	66.7
Total	16	100.0	20	100.0	27	100.0

*x^2 Not significant.

TABLE 3

Adjustment Scores and Occupational Level of Parents

Parental Occupational Level	Adjustment Scores					
	High		Medium		Low	
	N	%	N	%	N	%
Males						
High	17*	73.9	14	82.4	11	64.7
Low	6	26.1	3	17.6	6	35.3
Total	23	100.0	17	100.0	17	100.0
Females						
High	12	75.0	11	55.0	12	42.9
Low	4	25.0	9	45.0	16	57.1
Total	16	100.0	20	100.0	28	100.0

*x^2 Not significant.

TABLE 4

Adjustment Scores and Teachers' Ratings of Apparent Sociability

Teachers' Ratings	Adjustment Scores					
	High		Medium		Low	
	N	%	N	%	N	%
Males						
High	9*	40.9	7	43.8	3	18.8
Low	13	59.1	9	56.3	13	81.3
Total	22	100.0	16	100.1	16	100.0
Females						
High	9	56.3	9	45.0	11	39.3
Low	7	43.8	11	55.0	17	60.7
Total	16	100.1	20	100.0	28	100.0

*x^2 Not significant.

TABLE 5

Adjustment Scores and Number of Mutual Choice Friends

Mutual Choice Friends	Adjustment Scores					
	High		Medium		Low	
	N	%	N	%	N	%
			Males			
High	10*	43.5	6	37.5	6	35.3
Low	13	56.5	10	62.5	11	64.7
Total	23	100.0	16	100.0	17	100.0
			Females			
High	8	50.0	8	47.1	14	51.9
Low	8	50.0	9	52.9	13	48.1
Total	16	100.0	17	100.0	27	100.0

*x^2 Not significant.

TABLE 6

Adjustment Scores and Formal School Association

Number of Formal School Associations	Adjustment Scores					
	N	%	N	%	N	%
			Males			
High	12*	52.2	9	56.3	6	35.3
Low	11	47.8	7	43.8	11	64.7
Total	23	100.0	16	100.1	17	100.0
			Females			
High	18	50.0	13	68.4	15	53.6
Low	8	50.0	6	31.6	13	46.4
Total	16	100.0	19	100.0	28	100.0

*x^2 Not significant.

TABLE 7

Adjustment Scores and Young Adult Occupational Level

Occupational Level	Adjustment Scores: High N	High %	Medium N	Medium %	Low N	Low %
Males						
High	13*	56.5	9	52.9	9	52.9
Low	10	43.5	8	47.1	8	47.1
Total	23	100.0	17	100.0	17	100.0
Females						
High	9	56.3	11	55.0	6	21.4
Low	7	43.8	9	45.0	22	78.6
Total	16	100.1	20	100.0	28	100.0

$^*\chi^2$ Not significant.

APPENDIX 9

TAT Variables

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TABLE 1

Ego Functioning and Ego Complexity Scores of Adolescents*

Group	N	Ego Functioning (Means)	Ego Complexity (Means)
All Males	64	96.87	9.87
Married Males	44	95.43	9.65
Single Males	20	100.05	10.35
Married Females	61	110.24	12.19

*The procedure for Deriving Ego Functioning and Ego Complexity Scores was adapted from Dana (32) and Nawas (114).

The stories to five TAT cards were used. Cards 2, 3BM, 4, 6BM, and 7BM were utilized for both males and females. Two sub-scores for each story were derived, a sub-score for Perceptual Organization (PO) and a sub-score for Perceptual Range. The Ego Functioning scores are composed of totals on PO and PR after transformation to Z equivalents.

Perceptual Organization: Each story is checked to see which of the following elements are present. Credit is given to those which are present.

a). card description--physical description of two or more things or persons actually present in the picture.

b). present behavior--some activity or behavior occurring in the picture.

c). past events--things, events or situations which have taken place in the past, i.e., before the time of the scene pictured on the card and described in the story.

d). future events--things, events or situations which will take place in the future, i.e., after the time of the scenes pictured on the card and described in the story.

e). feeling--any expression of feeling, emotion or desire of the characters present in the story.

f). thought--any expression of thought, memory, dream or allied mental state present in the story.

g). outcome--the inclusion of a specific statement which indicates the ending, finale or conclusion to the story.

The task of perceptual organization is a complex one. It requires the individual to synthesize a story that contains not only the elements of thought and emotion, but that one must traverse three different time periods and come to a final statement of resolving the particular issue at hand.

Perceptual Range: the criteria for scoring "Perceptual Range" differ from one card to the next. In this category we are not concerned with the individuals' ability to adhere to the instructions and to make up a complete story, but we are dealing mainly with the demands of the stimulus properties of the cards. On the basis of normative studies, three such elements or expectations for each of the five cards were derived.

There are:

Card 2
1. Family consisting of young girl, adult male, woman; activity of woman indicated.
2. Field or fields or farm.
3. Books or school.

Card 3
1. Figure: sex and age indicated.
2. Figure's emotion noted.
3. Figure's activity indicated.

Card 4
1. Males: emotion noted, activity indicated.
2. Female in foreground: activity indicated.
3. Theme of conflict or cooperation between the characters in the card.

Card 6BM
1. Male: emotion noted, activity specified.
2. Female: emotion noted.
3. Personality referent.

Card 7BM
1. Older male: activity indicated, relationship to younger male specified.
2. Young male: emotion noted.
3. Personality referent.

The individual's PR raw score for each story ranges from zero to three, depending on how many of the three expectations for each card he explicitly mentioned in his story. The total PR raw score would be a summation of the credits earned on all five cards, ranging from zero to fifteen.

Ego Complexity

Complexity is here operationally defined as the number of concepts which the individual utilizes in describing six TAT characters: the young man in cards 4 and 6BM, the young woman in cards 2 and 4; the older man in card 7BM, and the older woman in 6BM. Our interest lies in the number of concepts used by the subjects in describing the TAT characters and not in the specific constructs used, or the frequency with which each was utilized. We are concerned with how differentiated the subject's construct systems are and how multi-faceted they tend to see significant figures in their environment.

Seventeen constructs selected were as follows:

a). achievement-recognition
b). affiliation-nurturance
c). competence
d). deliberation
e). flexibility
f). abasement
g). dominance
h). extragression
i). inadequacy-inferiority
j). rejection
k). acquisition-retention
l). anxiety
m). autonomy
n). exposition
o). heterosexuality
p). narcissism-exhibitionism
q). dependency

One of the criteria which guided our choice of these, rather than other, concepts is the frequency with which each concept occurred in the stories as determined empirically in a pilot study. Each of the seventeen constructs selected occurred in at least 10 per cent of the protocols. Other criteria used for the selection of the seventeen variables were psychological meaningfulness of the constructs and their appropriateness for TAT material.

TABLE 2

Ego Functioning and Ego Complexity Scores of Young Adults

Group	N	Ego Functioning (Means)	Ego Complexity (Means)
All Males	64	100.20	10.61
Married Males . . .	44	98.88	10.38
Single Males	20	103.10	11.10
Married Females	61	93.09	9.96

TABLE 3

Mean Change of Ego Functioning and Ego Complexity Scores Between High School and Young Adulthood

Group	N	Mean Change Ego Functioning	Mean Change Ego Complexity
All Males	64	+ 3.33	+ .74
Married Males . . .	44	+ 3.45	+ .73
Single Males	20	+ 3.05	+ .75
Married	61	-17.15	- 2.23

TABLE 4

Responses to Picture 1 (TAT)*

Theme Categories	Adolescent (1952) Total Class	Adolescent (1952) Follow Up Group Only	Adult (1960) Follow Up
I. Boy faces externally imposed task.			
A. Boy gives in or accepts task.			
1. rewarded	46	16	7
2. no outcome	44	16	29
B. Boy avoids task.			
1. allowed to quit	19	7	8
2. is punished	6	5	0
3. generalizes resentment	17	9	9
4. no outcome	41	10	11
5. miscellaneous	21	7	6
C. Boy rebels (gets rid of violin, runs away).			
1. regrets action	2	2	0
2. no resolution or outcome	3	2	2
3. miscellaneous	5	2	0
II. Boy faces self-imposed task.			
A. Boy meets task.			
1. rewarded	20	10	15
2. no outcome	12	5	4
B. Boy cannot meet task.			
1. tries again	10	4	4
2. receives help	6	2	0
3. is ambivalent, gives up, etc.	15	7	3
4. no outcome	6	2	3
C. Boy dreams of achievement.			
1. attains goal	6	2	5
2. no outcome	8	1	6
D. Miscellaneous	14	6	5
III. Boy's violin is broken.			
A. Boy's unhappiness is resolved through help of another	8	1	0
B. Boy rewarded through own efforts.	3	2	0
C. No outcome (boy's goal is blocked)	8	1	1
IV. Miscellaneous	41	16	15
Total	361	135	135

---

*For description of the cards and method of deriving categories see p. VI-14.

TABLE 5

Responses to Picture 2 (TAT)

Theme Categories	Adolescent (1952		Adult (1960) Follow Up
	Total Class	Follow Up Group Only	
I. Girl, central figure, member of a family group.			
A. Girl wants escape, achievement.			
1. attains goal	32	16	28
2. does not attain goal (cannot overcome obstacles).	12	5	4
3. wants to help family	12	3	5
4. reaffirms farm values (returns to farm, etc.)	11	3	1
5. miscellaneous	19	6	5
B. Girl wants to remain with family, help with chores.			
1. gives in, goes to school . . .	8	1	3
2. gives in, unhappiness unresolved	13	4	5
3. no conflict	12	4	4
C. Miscellaneous (sibling conflict, etc.)	23	10	16
II. Girl, central figure, has heterosexual interest.			
A. Girl dreams about man, date, marriage.			
1. attains goal	23	13	6
2. does not attain goal	20	8	9
B. Girl in conflict about marriage to farmer.			
1. marries farmer	5	1	0
2. decided against marriage . .	3	1	0
C. Girl married to farmer; unhappy about life	13	3	0
D. Miscellaneous	13	6	4
III. Girl, central figure, set apart from the group.			
A. Girl wants to improve the group	6	2	0
B. Girl uses observations creatively (writes book, term paper)	6	4	1

TABLE 5--Continued

Theme Categories	Adolescent (1952) Total Class	Adolescent (1952) Follow Up Group Only	Adult (1960) Follow Up
C. Girl rejects group or way of life.			
1. negatively evaluates farm or positively evaluates school	12	5	3
2. indifferent or vaguely affected by farm scene . .	13	6	1
D. Miscellaneous	11	4	9
IV. Family working toward one or more goals	16	3	11
V. No story.			
A. One family relationship noted	18	3	3
B. No family relationship noted	24	10	9
VI. Miscellaneous.			
A. Man or older woman is hero . .	10	3	6
B. Girl is hero	26	11	3
Total	361	135	135

TABLE 6

Responses to Picture 3 BM (TAT)

Theme Categories	Adolescent (1952)		Adult (1960)
	Total Class	Follow Up Group Only	Follow Up
I. Hero is in trouble with authority (has or is about to exceed limits of acceptable behavior).			
A. Boy is punished or expects punishment for minor offense (breaks window, etc.).			
1. unhappiness resolved (apologizes, etc.)	37	10	13
2. generalizes resentment . .	5	2	2
3. no outcome	17	5	6
4. miscellaneous	13	5	6
B. Boy is prohibited by parents.			
1. accepts parental values . .	3	1	0
2. no resolution	8	2	4
3. miscellaneous	7	2	3
C. Hero has committed major offense (murder, dope, etc.).			
1. hero punished and guilt resolved	3	1	1
2. hero is remorseful (no resolution)	10	3	7
3. hero punished, not remorseful	4	3	1
4. miscellaneous	12	5	12
D. Miscellaneous	11	3	4
II. Hero suffers loss.			
A. Pet is killed or lost.			
1. grief resolved through replacement, time	17	6	0
2. unhappiness unresolved . .	14	6	0
3. miscellaneous	6	2	1
B. Parent(s) die.			
1. grief resolved	4	2	1
2. no resolution of grief . .	12	4	0
3. miscellaneous	6	3	1
C. Other relative dies.			
1. grief resolved	17	5	3
2. no resolution	3	1	3
D. Separation or loss is only temporary.			
1. unhappiness resolved . . .	8	2	2
2. no resolution	6	2	2

TABLE 6--Continued

Theme Categories	Adolescent (1952)		Adult (1960) Follow Up
	Total Class	Follow Up Group Only	
E. Miscellaneous	7	2	1
III. Hero has unhappy interpersonal relationship.			
A. Girl has broken up with boy friend.			
1. reconciliation	8	3	3
2. finds substitute	5	1	1
3. unhappiness unresolved	6	2	1
4. miscellaneous	7	3	3
B. Hero feels rejected by parents.			
1. unhappines resolved by action of hero	5	4	0
2. parents change their attitude (magical)	6	3	0
3. miscellaneous	5	3	0
C. Hero has problems relating to peers			
1. unhappiness resolved	9	4	3
2. no resolution	5	2	0
D. Miscellaneous	0	0	0
IV. Hero is unhappy for unspecified reason			
A. Hero resolved unhappiness	2	1	6
B. No resolution of problem	13	7	9
C. Hero sleeps	5	0	1
D. Hero contemplates or commits suicide	5	1	5
V. Hero sleeps.			
A. Hero is tired after physical exertion	13	8	10
B. Other	8	3	3
VI. Miscellaneous	37	12	12
Total	361	134	130

TABLE 7

Responses to Picture 4 (TAT)

Theme Categories	Adolescent (1952)		Adult (1960)
	Total Class	Follow Up Group Only	Follow Up
I. Man is unfaithful, attracted to two women, wants to leave one woman for another.			
A. Wife (woman) intercedes.			
1. reconciliation	16	4	5
2. man rejects both	9	4	4
3. first woman gives up man . .	5	1	0
4. first woman kills man . . .	6	1	0
5. no outcome	28	10	2
6. miscellaneous	13	8	1
B. Wife does not intercede	7	0	1
C. No outcome	7	3	0
D. Miscellaneous	13	9	3
II. Man has committed or is about to commit aggressive, anti-social and/or impulsive act (from feminine viewpoint).			
A. Woman tried to restrain man..			
1. she succeeds	21	7	12
2. she fails	13	4	7
3. no outcome	28	7	19
4. miscellaneous	3	0	2
B. Miscellaneous	8	5	4
III. Woman's behavior is suspicious, questionable, amoral.			
A. Woman tries to influence male.			
1. she succeeds	11	3	2
2. she fails	6	3	3
3. no outcome	16	8	3
B. Miscellaneous	8	3	3
IV. Man is upset, disabled, feels inadequate.			
A. Woman aids, consoles troubled man.			
1. his problem partly resolved.	7	2	0
2. woman fails, problem unresolved	3	1	0
3. no outcome	9	6	0

TABLE 7--Continued

Theme Categories	Adolescent (1952)		Adult (1960) Follow Up
	Total Class	Follow Up Group Only	
B. Women encourages man with job difficulties.			
1. problems resolved	4	2	1
2. no resolution of problem .	3	1	5
C. Man feels interior to woman.			
1. problem resolved	5	5	0
2. no outcome	2	0	0
D. Miscellaneous	8	3	5
V. Man and woman disagree, have interpersonal difficulties.			
A. Woman tries to influence man's behavior (prevent him from leaving, etc.).			
1. she succeeds	16	6	9
2. she fails	9	1	9
3. no outcome	16	7	16
4. miscellaneous	9	5	2
B. Other woman intercedes on their behalf.			
1. reconciliation	8	4	0
2. other	3	2	0
C. Miscellaneous	10	3	5
VI. Miscellaneous	31	7	10
Total	361	135	135

TABLE 8

Responses to Picture 14 (TAT)

Theme Categories	Adolescent (1952)		Adult (1960) Follow Up
	Total Class	Follow Up Group Only	
I. Hero is primarily engaged in constructive or affectively positive thought or daydreams and/or seeks or receives stimulation from the physical environment.			
A. Hero is dreaming about his occupation, education, creative or scientific endeavors.			
1. hero will attain goal, in part	16	7	3
2. no outcome	13	6	2
3. miscellaneous	4	2	0
B. Hero thinks about girl, family.			
1. marries; considers marriage	7	5	2
2. dreams about reconciliation	6	2	2
3. miscellaneous, no outcome	7	3	1
C. Hero wonders about the future.	14	6	12
D. Hero reflects on past events and/or feels grateful, appreciative of nature, life, etc.	17	7	19
E. Hero wants to escape confines of room; to travel	10	1	2
F. Hero thinks about or plans coming day	7	4	11
G. Miscellaneous	10	3	10
II. Hero is observing physical environment or is engaged in routine activity (no affect).			
A. Hero observes, takes notes of surroundings			
1. hero continues routine act.	7	2	4
2. only descriptive	11	3	8
B. No reference to physical environment; hero opening or closing window	7	1	3
C. Miscellaneous	7	2	4

TABLE 8--Continued

Theme Categories	Adolescent (1952) Total Class	Adolescent (1952) Follow Up Group Only	Adult (1960) Follow Up
III. Hero has lost or fears loss of loved one.			
A. Hero's relationship with another has been severed.			
1. hero's unhappiness is resolved	13	4	0
2. unhappiness unresolved	4	1	0
3. miscellaneous	4	1	1
B. Miscellaneous	7	4	4
IV. Hero has been punished, deprived, restricted, dominated by parents, others.			
A. Hero decided to leave home.			
1. does not return	7	1	0
2. hero returns	10	3	0
3. miscellaneous	3	2	1
B. Hero breaks parental rules.			
1. hero is caught sneaking in or out	8	3	0
2. hero is eloping, visiting girl	4	1	0
3. miscellaneous	5	3	1
C. Hero, held captive, wants freedom.			
1. hero escapes or attains freedom	6	1	2
2. hero killed trying to escape	2	2	0
3. miscellaneous	3	1	1
D. Miscellaneous	6	0	2
V. Hero commits asocial act.			
A. Hero steals, caught, punished	11	5	1
B. Hero is spy, peeping tom	4	1	0
C. Hero commits murder	3	0	0
D. Miscellaneous	5	3	1
VI. Hero feels inadequate, handicapped and/or lonely or has unspecified problem.			
A. Hero has nightmare, is worried, restless.			
1. hero's problem resolved through God, nature, etc.	10	7	5

TABLE 8--Continued

Theme Categories	Adolescent (1952)		Adult (1960)
	Total Class	Follow Up Group Only	Follow Up
2. hero considers suicide, indeterminate or no outcome	10	2	4
3. no outcome or indeterminate	9	4	5
B. Hero is lonely, feels inferior, has a social problem.			
1. hero commits suicide	2	0	0
2. no outcome	9	5	2
C. Hero has occupational, money problems.			
1. hero's problem resolved . .	2	1	2
2. hero's problem unresolved .	11	4	2
D. Hero is physically and/or mentally handicapped; may overcome problem partly . . .	10	3	1
E. Miscellaneous	7	2	7
VII. Miscellaneous			
A. Figure is seen as woman	6	3	0
B. Hero is man	36	14	5
Total	360	135	130

TABLE 9

Adolescent Responses to Picture 6BM (TAT)

Response	Males		Females		x^2* p=
	N	%	N	%	
Separation I (Young man wants to marry).	6	9.4	20	28.2	.001
Separation II (Young man about to leave home).	10	15.6	20	28.2	.01
Inadequacy-competence (Young man in trouble, or has hurt older woman). .	25	39.1	16	22.5	.05
Loss (One or both have received news of accident, illness or death).	14	21.9	13	18.3	N.S.
Misc.	9	14.1	2	2.8	.02
Total	64	100.1	71	100.0	

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*Based on x^2, modified for use in two-by-two contingency tables (see Siegel, 132).

TABLE 10

Young Adult Response to Picture 6BM (TAT)

Response	Males		Females		x^2* p=
	N	%	N	%	
Separation I (Young man wants to marry).	0	0	8	11.8	.01
Separation II (Young man about to leave home).	12	18.8	29	42.6	.001
Inadequacy-competence (Young man in trouble, or has hurt older woman). .	19	30.7	9	13.2	.02
Loss (One or both have received news of accident, illness or death).	21	32.8	17	25.0	N.S.
Misc.	12	18.8	5	7.4	.10
Total	64	101.1	68	100.0	

TABLE 11

Responses of Adolescents and Young Adults to Picture 6BM (TAT)

Response	High School		Young Adult		Difference	x^2	P
	N	%	N	%			
Males							
Separation I (Young man wants to marry).	6	9.4	0		6	b*	.031
Separation II (Young man about to leave home).	10	15.6	12	18.8	-2	N.S.	
Inadequacy-competence (Young man in trouble, or has hurt older woman).	25	39.1	19	29.7	6	N.S.	
Loss (One or both have received news of accident, illness or death).	14	21.9	21	32.8	-7	2.40	<.20
Misc.	9	14.1	12	18.8	-3		
Total	64	100.1	64	100.1			
Females							
Separation I (Young man wants to marry).	20	30.8	18	12.3	12	4.76	<.05
Separation II (Young man about to leave home).	17	26.2	27	41.5	-10	3.12	<.10
Inadequacy-competence (Young man in trouble, has hurt older or woman).	15	23.1	8	12.3	7	2.77	<.10
Loss (One or both have received news of accident, illness or death).	11	16.9	15	23.1	-4	N.S.	
Misc.	2	3.1	7	10.8	-5		
Total	65	100.1	65	100.6			

*As determined from binomial test (see Siegel, 132).

TABLE 12

Responses to Picture 6BM (TAT) by Age and Young Adult Marital Status (Males only)

Responses	Married N	Married %	Single N	Single %	x^2
		Adolescent			
Separation I (Young man wants to marry).	5	13.5	1	3.4	N.S.
Separation II (Young man about to leave home).	8	21.6	2	6.9	N.S.
Inadequacy-competence (Young man in trouble, has hurt older woman). .	13	35.1	12	41.4	4.04 $P < .05$
Loss (One or both have received news of accident, illness or death).	10	27.0	4	13.8	N.S.
Misc.	1	2.7	10	34.5	N.S.
Total	37	99.9	29	100.0	
		Young Adult			
Separation I (Young man wants to marry).	0	0	0	0	N.S.
Separation II (Young man about to leave home).	10	23.3	2	10.0	N.S.
Inadequacy-competence (Young man in trouble, has hurt older woman). .	8	18.6	12	60.0	9.33 $P < .001$
Loss (One or both have received news of accident, illness or death).	17	39.5	4	20	N.S.
Misc.	8	18.6	2	10.0	N.S.
Total	43	100.0	20	100.0	

TABLE 13

Change in Manifest Theme Frequencies for the Total Group of Subjects ($N = 135$)

Category		Picture						Total
		1	2	3BM	4	6BM	14	
I	χ^2	N.S.*	4.98	6.45	11.02	7.26	8.60	
	p		<.05	<.01	<.001	<.01	<.01	
			I+	I	D++	D	I	
II	χ^2	N.S.	4.97	10.81	6.88	2.63	5.04	
	p		<.05	.001	<.01	<.10	<.05	
			D	D	I	I	I	
III	χ^2	. . .	N.S.	4.32	N.S.	2.70	N.S.	
	p			<.05		<.10		
				D		D		
IV	χ^2	N.S.	4.08	5.50	N.S.	3.18	5.06	
	p		<.05	<.02		<.10	<.05	
			I	I		I	D	
V	χ^2	. . .	N.S.	N.S.	3.50	N.S.	4.00	
	p				<.10		<.05	
					I			
VI	χ^2	. . .	N.S.	N.S.	N.S.	. . .	N.S.	
	p							
VII	χ^2	. . .	. . .	. . .	. . .	. . .	5.50	
	p						<.02	
							D	
No. of Themes Showing Change		3	6	6	6	5	7	33
Changes Significant at .05 Level or Better		0	3	4	2	1	5	15

*Not significant.

+I indicates increase in frequency of theme over time.

++D indicates decrease in frequency of theme over time.

APPENDIX 10

Semantic Differential

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TABLE 1

Semantic Differential Means, by Sex and Marital Status

	Females		Males		All Females	All Males
	Single	Married	Single	Married		
Scale: Gentle-rough						
Self						
Ideal self	1.70	1.99	3.52	2.44	1.95	2.79
Self now	2.60	3.00	2.87	2.85	2.95	2.86
H.S. self	2.90	2.85	2.65	3.44	2.85	3.18
Self 5 years	1.60	2.04	3.35	2.15	1.99	2.54
Parents						
Father H.S.	3.00	3.34	3.59	3.18	3.32	3.32
Father today	3.00	1.87	3.00	2.38	1.97	2.61
Mother H.S.	1.80	2.32	2.35	1.98	2.26	2.10
Mother today	1.30	1.50	2.30	1.70	1.47	1.91
Peers						
Peers male	3.90	3.46	3.96	3.15	3.52	3.41
Peers female	2.44	2.31	2.55	2.04	2.33	2.20
Scale: Loose-tight						
Self						
Ideal self	3.80	3.75	3.48	3.48	3.75	3.48
Self now	4.30	3.94	3.91	3.35	3.99	3.54
H.S. self	5.50	4.24	3.52	3.38	4.40	3.42
Self 5 years	4.10	3.42	3.87	3.38	3.51	3.54
Parents						
Father H.S.	4.17	4.60	3.68	3.82	4.56	3.77
Father today	3.17	3.29	4.05	3.24	3.28	3.54
Mother H.S.	4.50	4.25	3.78	3.13	4.28	3.35
Mother today	3.80	3.29	3.61	2.88	3.36	3.14
Peers						
Peers male	3.90	3.28	3.48	3.31	3.35	3.37
Peers female	3.78	3.53	3.68	3.23	3.56	3.37
Scale: Active-passive						
Self						
Ideal self	1.90	2.08	2.09	1.67	2.06	1.80
Self now	2.80	2.90	2.87	2.29	2.89	2.48
H.S. self	4.00	3.28	3.17	2.56	3.37	2.76
Self 5 years	1.70	1.80	2.35	1.67	1.79	1.89
Parents						
Father H.S.	3.33	3.27	2.64	3.43	3.27	3.17
Father today	3.67	3.13	2.86	3.05	3.17	2.98
Mother H.S.	3.60	3.29	2.48	2.28	3.33	2.35
Mother today	2.70	3.86	2.57	2.40	2.84	2.45
Peers						
Peers male	2.00	2.04	2.65	2.13	2.04	2.30
Peers female	3.00	2.23	2.50	2.56	2.32	2.54

Table 1--Continued

	Females		Males		All Females	All Males
	Single	Married	Single	Married		
Scale: Strong-weak						
Self						
Ideal self. .	2.10	1.82	1.91	1.67	1.85	1.73
Self now . .	2.70	3.07	3.00	2.44	3.02	2.62
H.S. self . .	4.40	3.69	3.61	2.69	3.78	2.99
Self 5 years.	2.10	1.93	1.91	1.79	1.95	1.83
Parents						
Father H.S. .	1.83	2.22	2.45	2.25	2.19	2.32
Father today.	3.00	2.22	2.41	2.41	2.29	2.41
Mother H.S. .	2.60	2.82	2.57	2.35	2.79	2.42
Mother today.	1.80	2.47	2.57	2.35	2.38	2.42
Peers						
Peers male . .	2.70	2.20	2.74	2.40	2.27	2.51
Peers female.	3.22	2.64	2.91	3.29	2.71	3.17
Scale: Nice-awful						
Self						
Ideal self. .	1.30	1.54	1.78	1.67	1.51	1.70
Self now . .	2.00	2.39	2.35	2.19	2.35	2.24
H.S. self . .	2.10	2.28	2.48	2.31	2.26	2.39
Self 5 years.	1.70	1.73	2.17	1.88	1.73	1.97
Parents						
Father H.S. .	2.00	2.03	2.45	2.00	2.03	2.15
Father today.	2.33	1.62	2.05	1.70	1.68	1.83
Mother H.S. .	1.60	1.87	1.91	1.63	1.83	1.72
Mother today.	1.40	1.39	1.91	1.51	1.39	1.65
Peers						
Peers male .	2.60	1.96	2.57	2.25	2.04	2.35
Peers female.	2.44	1.83	2.09	1.90	1.90	1.96
Scale: Steady-changeable						
Self						
Ideal self. .	2.10	2.37	2.35	2.46	2.33	2.42
Self now . .	2.70	3.68	3.35	2.71	3.56	2.92
H.S. self . .	3.00	4.42	4.78	3.67	4.25	4.03
Self 5 years.	2.40	1.75	2.13	1.85	1.83	1.94
Parents						
Father H.S. .	2.00	2.52	2.50	2.05	2.48	2.20
Father today.	3.17	2.19	2.05	2.03	2.28	2.03
Mother H.S. .	2.30	3.10	2.78	2.09	3.00	2.32
Mother today.	1.70	2.21	2.39	2.35	2.14	2.35
Peers						
Peers male .	3.30	3.04	3.43	2.83	3.08	3.03
Peers female.	3.22	2.67	3.55	3.33	2.73	3.40

Table 1--Continued

Scale: Giving-holding

	Females		Males		All Females	All Males
	Single	Married	Single	Married		
Self						
Ideal self . .	1.50	2.13	2.65	2.40	2.05	2.48
Self now . .	1.80	2.54	2.83	2.77	2.44	2.79
H.S. self . .	2.40	3.27	3.61	3.04	3.16	3.23
Self 5 years .	1.70	1.80	2.70	2.10	1.79	2.30
Parents						
Father H.S. .	2.50	2.67	2.36	2.45	2.66	2.42
Father today .	3.00	1.73	2.32	1.89	1.84	2.05
Mother H.S. .	1.60	2.28	2.22	1.61	2.19	1.81
Mother today .	1.30	1.61	2.26	1.84	1.57	1.98
Peers						
Peers male . .	3.10	3.04	2.91	3.19	3.05	3.10
Peers female .	3.22	2.37	3.32	2.81	2.47	2.97
Scale: Mellow-raw						
Self						
Ideal self . .	2.60	2.35	3.00	2.62	2.38	2.75
Self now . . .	2.90	2.61	3.30	2.94	2.64	3.06
H.S. self . .	3.20	3.07	3.61	3.60	3.09	3.61
Self 5 years .	2.40	2.11	2.91	2.42	2.15	2.58
Parents						
Father H.S. .	3.00	2.93	3.09	3.16	2.93	3.14
Father today .	3.00	2.14	3.09	2.65	2.22	2.81
Mother H.S. .	2.40	2.66	2.39	2.24	2.63	2.29
Mother today .	2.40	2.26	2.35	2.12	2.28	2.20
Peers						
Peers male . .	4.10	3.86	3.74	3.60	3.89	3.65
Peers female .	3.00	2.66	2.68	2.67	2.70	2.67
Scale: Flexible-stiff						
Self						
Ideal self . .	2.10	2.30	2.26	2.27	2.27	2.27
Self now . .	3.00	3.06	2.83	2.69	3.05	2.73
H.S. self . .	3.40	3.48	3.35	3.29	3.47	3.31
Self 5 years .	2.50	2.61	3.04	2.46	2.59	2.65
Parents						
Father H.S. .	4.00	4.01	3.59	3.98	4.01	3.85
Father today .	3.83	3.38	3.68	3.46	3.42	3.54
Mother H.S. .	3.60	3.50	3.00	2.72	3.51	2.81
Mother today .	2.80	2.98	2.91	2.70	2.96	2.77
Peers						
Peers male . .	3.60	3.03	3.17	3.29	3.10	3.25
Peers female .	3.00	2.59	3.32	2.60	2.63	2.83

Table 1--Continued

	Females		Males		All Females	All Males
	Single	Married	Single	Married		
Scale: Fast-slow						
Self						
Ideal self . .	2.80	2.68	2.00	1.96	2.69	1.97
Self now . .	4.10	3.35	3.22	2.71	3.44	2.87
H.S. self . .	4.20	3.68	4.09	3.17	3.74	3.46
Self 5 years .	2.60	2.89	2.74	2.17	2.85	2.35
Parents						
Father H.S. .	3.00	3.01	3.68	3.48	3.01	3.55
Father today .	4.33	3.54	3.50	3.24	3.61	3.34
Mother H.S. .	3.50	3.28	3.30	2.78	3.31	2.96
Mother today .	3.20	3.35	3.57	3.07	3.33	3.24
Peers						
Peers male . .	2.90	2.65	2.96	2.52	2.68	2.66
Peers female .	3.22	2.76	3.00	3.02	2.81	3.01
Scale: Deep-shallow						
Self						
Ideal self . .	2.30	2.76	2.57	2.44	2.70	2.48
Self now . .	3.10	3.14	2.65	2.67	3.14	2.66
H.S. self . .	3.40	3.51	3.70	3.40	3.49	3.49
Self 5 years .	2.40	2.66	2.30	2.33	2.63	2.32
Parents						
Father H.S. .	2.67	2.72	2.95	2.93	2.71	2.94
Father today .	3.00	2.89	2.73	3.27	2.90	3.07
Mother H.S. .	3.00	3.01	3.26	2.65	3.01	2.86
Mother today .	2.50	3.12	2.70	2.95	3.04	2.86
Peers						
Peers male . .	4.40	3.32	3.61	3.21	3.46	3.34
Peers female .	3.89	3.27	3.36	3.58	3.34	3.51
Scale: Pleasant-unpleasant						
Self						
Ideal self . .	1.40	1.37	1.48	1.37	1.37	1.41
Self now . .	2.40	2.18	2.26	2.21	2.21	2.23
H.S. self . .	2.80	2.17	2.04	2.15	2.25	2.11
Self 5 years .	1.80	1.54	2.09	1.62	1.57	1.77
Parents						
Father H.S. .	2.83	2.24	2.23	2.14	2.29	2.17
Father today .	3.00	1.73	2.00	1.78	1.84	1.86
Mother H.S. .	2.10	2.06	2.04	1.87	2.06	1.93
Mother today .	1.50	1.59	1.74	1.65	1.58	1.68
Peers						
Peers male . .	2.60	1.99	2.48	2.17	2.06	2.27
Peers female .	2.11	1.86	1.95	2.00	1.89	1.99

Table 1--Continued

	Females		Males		All Females	All Males
	Single	Married	Single	Married		
Scale: Sure-shifting						
Self						
Ideal self. .	1.50	1.59	1.57	1.54	1.58	1.55
Self now . .	3.00	2.96	3.30	2.79	2.96	2.96
H.S. self . . .	4.00	4.34	4.13	3.42	4.30	3.65
Self 5 years.	2.20	1.61	1.87	1.50	1.68	1.62
Parents						
Father H.S. .	2.17	2.09	2.36	2.11	2.10	2.20
Father today.	3.33	2.06	2.50	2.05	2.17	2.22
Mother H.S. .	2.30	2.90	2.57	2.22	2.82	2.33
Mother today.	2.40	2.33	2.52	2.30	2.34	2.38
Peers						
Peers male. .	3.70	2.90	3.35	3.10	3.00	3.18
Peers female.	2.78	2.51	3.32	3.17	2.54	3.21
Scale: Open-closed						
Self						
Ideal self. .	2.80	2.41	2.22	2.10	2.46	2.14
Self now . .	2.80	2.99	3.13	2.83	2.96	2.93
H.S. self . .	4.00	3.79	3.22	2.98	3.81	3.06
Self 5 years.	2.60	2.34	2.35	2.31	2.37	2.32
Parents						
Father H.S. .	3.83	3.28	3.18	3.30	3.33	3.26
Father today.	3.33	2.37	3.32	2.97	2.45	3.10
Mother H.S. .	3.20	3.09	3.13	2.57	3.10	2.75
Mother today.	2.40	2.41	2.83	2.56	2.41	2.65
Peers						
Peers male. .	3.80	2.62	3.09	2.75	2.77	2.86
Peers female.	3.00	2.40	2.95	2.98	2.47	2.97
Scale: Warm-cold						
Self						
Ideal self. .	1.60	1.65	2.04	1.77	1.64	1.86
Self now . .	2.20	2.31	2.43	2.33	2.30	2.37
H.S. self . .	2.70	2.62	2.78	2.67	2.63	2.70
Self 5 years.	1.60	1.68	2.13	1.81	1.67	1.92
Parents						
Father H.S. .	2.83	2.60	2.55	2.48	2.62	2.50
Father today.	2.33	2.00	2.59	2.16	2.03	2.32
Mother H.S. .	1.60	3.33	2.00	1.80	2.26	1.87
Mother today.	1.40	1.80	2.00	1.70	1.75	1.57
Peers						
Peers male. .	2.90	2.38	2.65	2.63	2.44	2.63
Peers female.	2.67	2.07	2.55	2.31	2.14	2.39

Table 1--Continued

Scale: Firm-fluid

	Females		Males		All Females	All Males
	Single	Married	Single	Married		
Self						
Ideal self. .	3.30	2.37	3.06	2.40	2.48	2.61
Self now . .	4.00	3.44	3.83	2.77	3.51	3.11
H.S. self . .	4.50	4.13	4.52	3.85	[illegible].17	4.07
Self 5 years.	3.50	2.69	2.74	2.50	2.79	2.58
Parents						
Father H.S. .	3.17	2.67	2.68	2.91	2.71	2.83
Father today.	3.83	3.13	3.09	3.35	3.19	3.25
Mother H.S. .	2.50	3.25	3.87	3.35	3.15	3.52
Mother today.	2.80	3.53	3.83	3.51	3.43	3.62
Peers						
Peers male. .	4.50	3.61	3.52	3.71	3.72	3.65
Peers female.	3.78	3.59	3.77	4.02	3.61	3.94

Scale: Quick-still

	Females Single	Females Married	Males Single	Males Married	All Females	All Males
Self						
Ideal self. .	2.40	2.76	2.13	2.23	2.72	2.20
Self now . .	3.40	3.13	3.00	2.48	3.16	2.65
H.S. self . .	3.90	3.54	3.17	2.85	3.58	2.96
Self 5 years.	2.60	2.83	2.22	2.50	2.80	2.41
Parents						
Father H.S. .	2.50	3.01	3.27	3.18	2.97	3.21
Father today.	3.17	3.57	3.45	3.16	3.54	3.27
Mother H.S. .	3.10	2.76	2.78	2.61	2.81	2.67
Mother today.	2.70	2.80	2.74	3.02	2.79	2.92
Peers						
Peers male. .	2.80	2.49	2.74	2.60	2.53	2.65
Peers female.	2.78	2.74	2.77	3.21	2.75	3.07

Scale: Full-empty

	Females Single	Females Married	Males Single	Males Married	All Females	All Males
Self						
Ideal self. .	2.00	1.72	1.83	1.60	1.75	1.68
Self now . .	2.30	2.41	2.74	2.27	2.40	2.42
H.S. self . .	3.20	3.54	3.43	2.60	3.49	2.87
Self 5 years.	1.70	1.66	2.04	1.73	1.67	1.83
Parents						
Father H.S. .	2.17	2.69	2.55	2.68	2.64	2.64
Father today.	2.83	2.41	2.64	2.54	2.45	2.58
Mother H.S. .	2.10	2.75	2.35	2.11	2.65	2.19
Mother today.	1.50	2.11	2.35	2.21	2.03	2.26
Peers						
Peers male. .	3.40	2.81	2.83	2.98	2.89	2.93
Peers female.	2.89	2.27	2.68	2.88	2.54	2.81

Table 1--Continued

	Females		Males		All Females	All Males
	Single	Married	Single	Married		
Scale: Sweet-sour						
Self						
Ideal self. .	1.80	1.80	2.22	2.06	1.80	2.11
Self now . .	2.40	2.46	2.65	2.81	2.46	2.76
H.S. self . .	2.70	2.58	2.65	2.85	2.59	2.79
Self 5 years.	1.80	1.89	2.57	2.08	1.88	2.24
Parents						
Father H.S. .	2.67	2.64	2.86	2.93	2.64	2.91
Father today.	2.83	2.11	2.91	2.65	2.17	2.75
Mother H.S. .	1.60	2.21	2.09	1.78	2.13	1.88
Mother today.	1.50	1.71	2.04	1.81	1.68	1.89
Peers						
Peers male. .	3.10	2.46	2.83	3.13	2.54	3.03
Peers female.	2.33	2.07	2.32	2.17	2.10	2.21
Scale: Settled-unsettled						
Self						
Ideal self. .	2.00	1.79	1.96	1.54	1.81	1.68
Self now . .	3.40	2.37	3.43	2.67	2.49	2.92
H.S. self . .	3.50	4.52	4.57	4.58	4.40	4.58
Self 5 years.	2.20	1.39	2.04	1.83	1.49	1.90
Parents						
Father H.S. .	2.17	1.93	2.14	2.07	1.95	2.09
Father today.	2.67	2.25	2.09	1.76	2.29	1.88
Mother H.S. .	1.60	2.24	2.22	1.87	2.15	1.99
Mother today.	1.70	1.88	2.13	1.93	1.86	2.00
Peers						
Peers male. .	3.70	2.80	3.43	3.25	2.91	3.31
Peers female.	3.11	2.26	3.23	2.50	2.35	2.73
Scale: Responsive-reserved						
Self						
Ideal self. .	2.30	2.99	2.78	3.27	2.90	3.11
Self now . .	3.30	3.45	3.35	3.29	3.43	3.31
H.S. self . .	4.30	4.17	3.96	3.63	4.19	3.73
Self 5 years.	2.40	2.69	2.57	2.69	2.65	2.65
Parents						
Father H.S. .	3.33	4.07	2.82	3.45	4.01	3.24
Father today.	2.00	3.11	3.18	3.30	3.07	3.25
Mother H.S. .	3.20	3.38	2.57	2.78	3.36	2.71
Mother today.	2.10	2.61	2.43	2.74	2.54	2.64
Peers						
Peers male. .	3.20	2.91	2.65	3.10	2.95	2.96
Peers female.	3.11	2.47	2.86	2.92	2.54	2.90

Table 1--Continued

Scale: Soft-hard

	Females		Males		All Females	All Males
	Single	Married	Single	Married		
Self						
Ideal self. .	2.10	2.63	4.65	4.04	2.57	4.24
Self now . .	2.50	2.56	3.35	3.56	2.56	3.49
H.S. self . .	2.60	2.75	3.39	3.60	2.73	3.54
Self 5 years.	2.50	2.34	4.09	3.63	2.36	3.77
Parents						
Father H.S. .	3.33	3.78	4.23	4.16	3.74	4.18
Father today.	2.83	2.52	4.05	3.43	2.55	3.66
Mother H.S. .	2.40	2.26	3.09	2.78	2.28	2.88
Mother today.	1.90	1.95	2.78	2.37	1.95	2.52
Peers						
Peers male. .	3.60	3.41	4.17	4.00	3.43	4.06
Peers female.	2.89	2.30	2.55	2.33	2.37	2.40

Scale: Tame-wild

	Females		Males		All Females	All Males
	Single	Married	Single	Married		
Self						
Ideal self. .	2.80	2.61	3.43	2.79	2.63	3.00
Self now . .	2.60	2.32	3.22	2.60	2.36	2.80
H.S. self . .	3.30	2.97	3.39	3.85	3.01	3.70
Self 5 years.	2.40	1.83	3.00	2.31	1.90	2.54
Parents						
Father H.S. .	2.17	2.52	2.55	2.27	2.49	2.36
Father today.	3.00	2.00	2.50	1.89	2.09	2.12
Mother H.S. .	1.90	1.93	2.30	1.80	1.92	1.97
Mother today.	1.80	1.77	2.13	1.81	1.78	1.92
Peers						
Peers male. .	4.00	3.04	4.13	3.50	3.16	3.70
Peers female.	2.33	2.16	2.82	2.54	2.18	2.63

Scale: Good-bad

	Females		Males		All Females	All Males
	Single	Married	Single	Married		
Self						
Ideal self. .	1.70	1.82	1.96	1.81	1.80	1.86
Self now . .	2.20	2.14	2.30	2.13	2.15	2.18
H.S. self . .	2.20	2.31	2.35	2.69	2.30	2.58
Self 5 years.	1.70	1.76	2.00	1.73	1.75	1.82
Parents						
Father H.S. .	2.50	1.88	1.64	1.86	1.88	1.79
Father today.	2.17	1.57	1.82	1.62	1.62	1.69
Mother H.S. .	1.80	1.69	1.52	1.30	1.71	1.38
Mother today.	1.50	1.50	1.57	1.35	1.50	1.42
Peers						
Peers male. .	2.60	2.19	2.70	2.33	2.24	2.45
Peers female.	2.22	1.94	2.18	2.10	1.97	2.13

Table 1--Continued

Scale: High-low

	Females		Male		All Females	All Males
	Single	Married	Single	Married		
Self						
Ideal self. .	2.10	1.99	2.04	2.08	2.00	2.07
Self now . .	2.90	2.59	2.52	2.42	2.63	2.45
H.S. self . .	2.70	3.14	2.70	3.08	3.09	2.96
Self 5 years.	1.60	1.94	2.13	1.79	1.90	1.90
Parents						
Father H.S. .	2.33	2.36	2.09	2.32	2.36	2.24
Father today.	2.50	2.29	2.09	1.95	2.30	2.00
Mother H.S. .	2.10	2.49	2.13	1.80	2.44	1.91
Mother today.	2.00	2.09	2.00	1.98	2.08	1.98
Peers						
Peers male. .	2.90	2.41	2.57	2.50	2.47	2.52
Peers female.	2.56	2.24	2.23	2.35	2.28	2.31

TABLE 2

Perceived Change Since High School[*] (Semantic Differential)

Scale	Single Females (N=10)	Married Females (N=71)	Single Males (N=23)	Married Males (N=48)
gentle-rough	.30	-.15	.22	.59
loose-tight	1.20	.30	-.39	-.03
active-passive	1.20	.38	.30	.27
strong-weak	1.70	.62	.61	.25
nice-awful	.10	-.11	.13	.12
steady-changeable . . .	.30	.74	1.43	.96
giving-holding	.60	.73	.78	.27
mellow-raw	.30	.46	.31	.66
flexible-stiff	.40	.42	.52	.60
fast-slow	.10	.33	.87	.46
deep-shallow	.30	.37	1.05	.73
pleasant-unpleasant . .	.40	-.01	-.22	-.06
sure-shifting	1.00	1.38	.83	.63
open-closed	1.20	.80	.09	.15
warm-cold	.50	.31	.35	.34
firm-fluid	.50	.69	.69	1.08
quick-still	.50	.41	.17	.37
full-empty	.90	1.13	.69	.33
sweet-sour	.30	.12	.00	.04
settled-unsettled . . .	.10	2.15	1.14	1.91
responsive-reserved . .	1.00	.72	.61	.34
soft-hard	.10	.19	-.04	-.04
tame-wild	.70	.65	-.17	1.25
good-bad	.00	.17	.05	.56
high-low	-.20	.55	.18	.66

[*] Mean differences between "self in high school" and "self now".

TABLE 3

Comparison of Married Males, Single Males, and Married Females on the Derived Factors (Means)

Concept Factor	Single Males	Married Males	Married Females
MYSELF			
Stability	3.49	2.74	3.00
Activity	3.30	2.63	2.97
Masculinity-femininity	3.12	3.06	2.68
Responsiveness	3.22	3.18	3.49
SELF IN HIGH SCHOOL			
Stability	4.17	3.85	4.07
Activity	3.55	2.92	3.31
Masculinity-femininity	3.13	3.66	2.94
Responsiveness	4.11	3.48	4.15
IDEAL SELF			
Stability	2.36	1.82	1.99
Activity	2.24	2.04	2.50
Masculinity-femininity	4.00	3.07	2.39
Responsiveness	2.83	3.18	2.95
SELF IN FIVE YEARS			
Stability	2.34	1.94	1.88
Activity	2.57	2.32	2.42
Masculinity-femininity	3.69	2.71	2.11
Responsiveness	2.61	2.65	2.75

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